



A Weekly Journal of Pharmacy and the Drug-trade.

ESTABLISHED 1859.

Head Office, 42 Cannon Street, London, E.C.

Branch Offices: Melbourne, Vic. .. 231 Elizabeth Street.  
 Sydney, N.S.W. .. 114a Pitt Street.  
 Adelaide, S.A. .. 76 Brookman's Building,  
 Grenfell Street.  
 New York, U.S.A. .. Park Row Building.

#### SUBSCRIPTION RATES.

Ten shillings a year in advance, post free to any part of the world, including a copy of THE CHEMISTS' AND DRUGGISTS' DIARY next published. Single copy, 4d.; Summer or Winter Number, 1s.; DIARY, 3s. 6d. Postal orders and cheques to be crossed "Martin's Bank (Limited)."

THIS JOURNAL is regularly supplied by subscription to the whole of the Members of SIXTEEN PHARMACEUTICAL SOCIETIES in the British Empire. The associate Journal, *The Chemist and Druggist of Australasia*, published at Melbourne and Sydney, is also supplied to all Australasian subscribers.

Terms for advertising may be obtained on application to the Publisher, C. & D., 42 Cannon Street, London, E.C.

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#### OUR WINTER ISSUE.

The date is January 26, 1901. The number will be  
 The first *édition de luxe* of the twentieth century, and  
 The best for beginning the year's business, as well as  
 The brightest for a good advertisement, and  
 The surest for distributing circulars and price-lists.  
 It will be sent to 12,000 business-places.  
 It will be read by the best buyers in the trade.  
 It will be kept for reference in every part of the globe.  
 It will be well, therefore, that all firms wishing to do  
 business or to increase their business with buyers in  
 the drug, chemical, and allied trades of the British  
 Empire to ensure that they have an advertisement or an  
 inset in

The Winter Issue of THE CHEMIST AND DRUGGIST.

#### Summary.

THIS number begins Vol. LVIII.

HYDROCHLORIC acid is fast becoming the successor of carbolic (page 4).

B.P. IPECACUANHA-PREPARATIONS are stable, so Mr. H. W. Gadd finds (p. 21).

NICOTINE FUMIGATOR has caused the death of a traveller at Birmingham (page 5).

THE customary crop of business changes incident to the new year is dealt with on page 9.

THE DEATHS of Messrs. A. C. Sim (Kobe) and W. Willi (Dublin) are reported (p. 12).

NEW FACTS about the composition of West Indian sandal-wood oil are mentioned on p. 16.

INTERNAL PARASITES in domestic animals is the subject dealt with in our veterinary columns (page 24).

MR. T. H. W. IRRIS is the member of the Pharmaceutical Fauna depicted by Mr. Fred Reynolds on p. 16.

SOME OF THE THINGS which an ethical pharmacist should and should not do are mentioned in an article on p. 17.

THAT historic fatality due to the use of aconite-root for horseradish happened again in Luton this week (page 4).

EVERY man who goes to the Rand for the next six months must carry a rifle with him, says a correspondent (page 8).

CALCINOL is the fancy name for calcium iodate, which Dr. William Mackie recommends as an antiseptic (p. 12).

OF 155 students who got our last analytical mixture of salts 96 sent in reports. Full details are given on pp. 2 and 3.

THE position of army compounders and the need for improving it are urged by Mr. John Gibson in an article on p. 10.

A DENTAL SPONGE has caused the death of a man near Cardiff. He drew it into his lungs while under "gas" (page 5).

THE stronger alcoholic liquors are now taxed higher in France, and this includes perfumes, medicinal tinctures, and the like (p. 7).

CONCENTRATED OFFICIAL LIQUORS deposit copiously. Mr. Frederick Bascombe gives on p. 20 analytical data concerning them.

FIVE new limited companies to trade as chemists and druggists have been registered at Somerset House this week (p. 22).

THE sale of chlorodyne produced an interesting discussion (fully reported on page 4) at an inquest in St. Bartholomew's Hospital on December 28.

THE shortcomings of the Royal Army Medical Corps are scathingly exposed by a Transvaal chemist who has been serving with it for a year (p. 10).

ON JANUARY 1, 1901, at Sydney, N.S.W., the Commonwealth of Australia was inaugurated. It gives us the opportunity of referring to Australia's future (p. 16).

LIQUID EXTRACT OF CASCARA SAGRADA as found in trade is variable in quality. Mr. G. F. Merson has examined ten specimens, and his results are printed on p. 20.

MR. EDWARD M. HODGSON, of Messrs. McMaster & Hodgson, Dublin, is to be knighted. Dr. Thomas Barlow and Dr. W. S. Church receive baronetcies. Particulars of these and other honours are given on page 9.

THE NEW YEAR opens quietly in the produce-markets, and is likely to be so until public sales are resumed. Cascara sagrada is dearer, and so are oils of lemon, bergamot, and orange. Galls, Persian gum arabic, sweet almond oil, cod-liver oil, orris, and terebene, are among the lower articles. Quinine is nominal (p. 33).

#### Write on a Postcard.

Three riddles, dealing with pharmaceutical subjects, in the following style:—

How shall we Burdon Sanderson?—By making him Carey-Foster.

What did Michael Carteighe?—News holme.

Why is vaseline?—Because it's not fat.

Put name and address on postcard and send to us before January 22. We shall award a guinea or the best three riddles.

## Students' Corner.

CONDUCTED BY RICHARD J. MOSS, F.I.C., F.C.S.

### QUALITATIVE ANALYSIS.

STUDENTS' applications for portions of the next mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Monday, January 7, 1901, and the samples will be posted on January 8.

The mixture of salts sent to students on November 29 contained 3 parts of copper sulphate, 1 of tartar emetic, and 1 of bismuth oxynitrate.

The calculated composition of such a mixture is—

Cu	...	...	...	...	15.25
Sb	...	...	...	...	7.11
Bi	...	...	...	...	13.72
K	...	...	...	...	2.27
SO <sub>4</sub>	...	...	...	...	23.10
NO <sub>3</sub>	...	...	...	...	4.05
C <sub>4</sub> H <sub>4</sub> O <sub>6</sub>	...	...	...	...	8.64
O	...	...	...	...	1.98
H <sub>2</sub> O	...	...	...	...	23.88
					100.00

Iron and a slight trace of calcium were present as impurities.

### REPORTS.

There were 155 packets of the powder sent to applicants, and 96 reports of analyses were received in reply.

The failures in the detection of the several constituents were:—Tartaric acid, 37; nitric acid, 31; antimony, 29; potassium, 21; bismuth, 19, sulphuric acid, 2; copper, 0.

A common mistake made by the less experienced of our correspondents was the insufficient use of sulphuretted hydrogen as a group-reagent. It is always necessary to pass the gas through the acid solution until it is in decided excess—that is, until the solution smells strongly of sulphuretted hydrogen after it has been warmed and well shaken. This is not always enough. In the presence of much free acid it is necessary to make sure that the excess of acid has not interfered with the precipitation. For this purpose a portion of the liquid is filtered off, diluted liberally with water, and again submitted to the action of sulphuretted hydrogen. If no further precipitate forms, it may safely be concluded that the original precipitation was complete.

When the presence of copper, and the absence of mercury, is indicated in the preliminary examination, the precipitated sulphides should be treated with sodium sulphide instead of ammonium sulphide, to remove arsenic, antimony, and tin. In the present case those who used the ammonium salt obtained a brown precipitate on acidulating the alkaline solution, instead of a precipitate of a bright orange-red colour. The brown colour was due to an admixture of copper sulphide, this compound being slightly soluble in ammonium sulphide.

It is highly important that the precipitated sulphides should be washed free of acid before treatment with the alkaline sulphide. The water used for washing should contain sulphuretted hydrogen, and the washing and subsequent treatment with alkaline sulphide, and with nitric acid, should be completed quickly, or difficulties may arise from oxidation.

It was in the detection of tartaric and nitric acid that the more serious difficulties arose. The plan commonly adopted for the removal of the heavy metals—boiling with sodium carbonate—was not applicable in this case. Copper could not be removed in this way, because it formed with the tartaric acid a compound soluble in sodium carbonate. Another method that is frequently employed gave most satisfactory results—viz., the removal of the heavy metals as

sulphides. On treating the powder with a fairly large quantity of water, and passing sulphuretted hydrogen through the liquid for some time, with frequent agitation, the soluble and insoluble salts in the powder were completely decomposed. On filtering, and boiling off the dissolved gas, a solution was obtained containing only the three acids and potassium. On neutralising this solution with sodium carbonate, it could then be concentrated to any desired extent by evaporation without the risk of volatilising the nitric acid. We recommend those of our correspondents who were unsuccessful in detecting the acids to try this plan with a similar powder of their own preparation.

Tartaric acid is usually precipitated as a calcium salt; this is a crystalline body, and every crystal requires time to grow. The presence of other salts may greatly increase the solubility of the tartrate or retard the process of crystallisation; time must therefore be allowed before concluding that a calcium salt gives no precipitate in a solution supposed to contain a tartrate.

### PRIZES.

The First Prize for the best analysis has been awarded to E. H. HARRY, 57 Old Town, Clapham.

The Second Prize has been awarded to JAMES R. STOTT, c/o W. Murray Maxton, Chemist, Kelso, Scotland.

[The tournament position will be given next week.]

### MARKS AWARDED FOR ANALYSES.

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### TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.



Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as a second prize.

**Note.**—All communications should include the names and addresses of the writers.

**J. R. STOTT.**—The action of sulphuric acid on the powder was modified by the presence of other salts, the relatively large quantity of water, and the presence of a nitrate. The oxygen shown in the above calculated composition of the powder is that known to exist in the bismuth and antimony salts in excess of the oxygen contained in the acid radicles and water. That such oxygen exists in these salts can only be satisfactorily shown by quantitative analysis.

**G. H. BUCKLEY.**—It is not necessary to give quantitative results: they cannot be considered in awarding marks, and you are sent only enough powder for purely qualitative work.

**SALVONA.**—Though you detected copper it was omitted in your list of constituents found.

**REES.**—Nitric acid was very easily detected in a solution prepared by removing the heavy metals as sulphides.

**BOSTON.**—See remarks to "Rees."

**SILVER.**—The part of the powder insoluble in water gave a very decided reaction for nitric acid, when the ferrous-sulphate test was properly applied; but some skill, which can only be acquired by practice, is required to get satisfactory results.

**L. E. A.**—See remarks to "Rees."

**ERGOT.**—Reduction by means of copper and sulphuric acid is not a sufficiently sensitive test to rely upon for the detection of small quantities of nitric acid, but with care it was possible in this case to obtain the red fumes.

**HYDRONYL.**—Naturally enough you omitted to examine the part insoluble in water for nitric acid, but having detected bismuth in this part, the possibility of its being present as nitrate might have occurred to you.

**TANNHÄUSER.**—The indications of antimony would have been much more decided if you had taken more care in separating the sulphide. Sodium sulphide was the best solvent to employ.

**ANILIN.**—The sodium-carbonate method of removing the heavy metals was inapplicable in this case, but supposing it to have answered the purpose, there would be a large excess of sodium salts in solution, and they would greatly retard the precipitation of calcium tartrate, so that it was necessary to allow time for the precipitate to form.

**FLOS.**—See remarks to "Anilin." It is possible that the solution which failed to give a precipitate with calcium chloride was slightly acid.

**BRESCI.**—The aqueous extract gave a white precipitate with silver nitrate, but this dissolved completely in nitric acid, so it could not have been silver chloride.

**J. LAWSON.**—You gave no particulars of the treatment of the sulphuretted-hydrogen precipitate. Perhaps you did not wash it free from acid before trying the effect of an alkaline solvent upon it.

**PERSEVERANCE.**—The powder did not contain an appreciable trace of chlorine, possibly your sodium carbonate contains chlorine.

**W. H. WATT.**—You detected organic matter in the preliminary examination, but made no further mention of it. See remarks to "Perseverance."

**RADICAL.**—Your failure to detect copper in the precipitated sulphides seems almost incredible, unless you omitted to add ammonia in decided excess to the nitric acid solution.

**LOUGHLORNE.**—It is possible you failed to notice the bismuth precipitate on account of the deep-blue colour of the solution.

**LESTER.**—The results obtained with the sulphuretted-hydrogen precipitate show that the antimony must have been removed as sulphide. If the precipitate was not well washed, the treatment with a fixed alkali may have been rendered abortive by the acid present.

**MARCUS.**—You left unexplained the organic matter detected in the preliminary examination.

**J. F. WARD.**—You might have been pretty certain the powder did not contain potassium chloride in any quantity, as that salt is very hygroscopic, and would have made a pasty mass.

**PHARMACY.**—The precipitate you could not identify was due to bismuth. You should repeat that part of the work with a mixture of your own preparation.

**R. D. D.**—Potassium was best detected by the very operations

you describe. Everything depends upon the way they are carried out.

**Όλογος.**—The bismuth precipitate was rather small for reduction to the metallic state. It was best identified by the reaction of the chloride with water. This reaction, taken in conjunction with the colour of the sulphide, is conclusive.

**SMILAX.**—If you had used sodium sulphide instead of ammonium sulphide for treating the mixed sulphides, the acidulation of the alkaline filtrate would have yielded a precipitate of a bright orange-red colour, instead of the brown precipitate you obtained, owing to the copper present.

**CYANOGEN.**—There was a great deal more to be learned from the effects of heat on the powder than you managed to discover. The burnt-sugar odour, though faint, was quite unmistakable.

**CACHET.**—See remarks to "Smilax."

**R. MACDONALD.**—You note that the powder did not clear when heated, and concluded that organic salts must be absent. A mixture including a small quantity of an organic salt, along with a salt which readily parts with oxygen, may show little or no evidence of carbonisation.

**LOKI.**—See remarks to R. Macdonald.

**W. RAYNER.**—It was manifest barium could not be a constituent, because you found the powder dissolved in dilute hydrochloric acid and contained a sulphate.

**SPOROPHORE.**—Study the reactions of lead and acetic acid by actual experiment, and you will find they are quite unlike those by which you so conclusively demonstrated the presence of these substances in the powder.

**CAROLUS.**—A mixture of the sulphates and nitrates of copper, iron, and potassium would dissolve readily in water; but the powder was not all soluble, therefore it must have contained other salts.

**X. Y. Z. (S.).**—It is probable you did not use enough sulphuretted hydrogen. It was necessary to pass the gas through the solution until it smelt strongly of sulphuretted hydrogen after warming and thorough shaking.

**ILAN.**—See remarks to "X. Y. Z. (S.)."

**RANDOM.**—A powder which was not all soluble in water must have contained other constituents than those you found.

**T. E. W.**—You should have used hydrochloric instead of sulphuric acid in the turmeric-paper test for boric acid.

**OWENS.**—If lead had been present in notable quantity along with a sulphate, the powder would not have dissolved in dilute hydrochloric acid.

**G. BUTTERFIELD.**—See remarks to "X. Y. Z. (S.)."

**A. G. G.**—See remarks to "Owens."

**FORTUNA.**—The portion of the precipitated sulphides insoluble in an alkaline sulphide dissolved readily in warm dilute nitric acid. A sublimate of metallic mercury presents such marked peculiarities one would suppose it impossible to mistake anything else for it.

**PEPO.**—Instead of using the dry tests as confirmatory of the results obtained in the wet way, they should form the preliminary part of the work. They give a general idea of the kind of mixture you are dealing with, and often enable one to select the most suitable methods of separation to be followed in the wet analysis.

**SRES.**—You should not have assumed that only three metals could be present. Your suspicions about tin were well founded.

**ADUROL.**—You made no attempt to detect either bismuth or antimony.

**TRACOTITA.**—Your proof of the presence of a chromate was inconsistent with your proof of the absence of chromium. Your supposed silica was simply sulphuric acid. The silver precipitate was soluble in nitric acid as well as ammonia, therefore it could not have been silver chloride.

**OMEGA.**—The colour-effect you mention was in part due to dehydration of the copper sulphate, and in part to the decomposition of the tartrate.

"THE ART OF DISPENSING."—Referring to the new edition, the *Druggists' Circular* says:—"The book tells in a straightforward way just what every pharmacist wants to know—namely, how to dispense medicines. Difficult prescriptions are shown, and methods of overcoming their difficulties are explained. A separate chapter is devoted to each of a large number of different kinds of preparations, as pills, powders, ointments, plasters, &c., and much space is given to the study of incompatibles, foreign prescriptions, new remedies, homeopathic dispensing, and such other subjects as, being somewhat out of the ordinary, would be apt to puzzle the dispenser."



## English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

### Brevities.

Messrs. Evans, Gadd & Co., have contracted to supply cylinder oil at 1s. 1d. per gal. to the Exeter City Council.

A Birkenhead hawker, named Maching, killed himself last week by diving 35 feet from a window into a hamper of empty soda-water syphons.

James Ritson & George Wakefield, two Sheffield shopkeepers, were each fined 20s. and costs last week for selling camphorated oil deficient in camphor.

Two Accrington ladies have given 1,000l. worth of Lancashire and Yorkshire Railway 3 per cent. debenture stock to establish a scholarship, or scholarships, in chemistry at the Blackburn Technical School.

Professor W. R. Smith, M.D., D.Sc., F.I.C., has been appointed public analyst to the newly-formed Woolwich Borough Council. The salary is 250l. per annum, for which 500 samples have to be analysed yearly.

The United Alkali Company (Limited), of Liverpool, has erected a plant at its Sullivan Works, Widnes, for the manufacture of carbide of calcium. The carbide department is under the management of Mr. J. Bastick, electrical engineer.

A correspondent informs us that C. E. Perks, the man who sends begging letters and formulæ from Liverpool, is now writing from 37 Bective Street of that city. He is writing the same old story, and our subscribers are advised not to pay any attention to him.

During the gale on December 23 a chemist's signboard in Queen's Road, Westbourne Grove, was blown down and fell on a cabman named Barnes, who received a severe scalp-wound. Barnes was treated in St. Mary's Hospital, and subsequently discharged.

At a meeting of the Guardians of the united parishes of St. Giles-in-the-Fields and St. George, Bloomsbury, on January 2, the tender of Messrs. Burgoyne, Burbidges & Co., 12 and 14 Coleman Street, City, was accepted for the supply of drugs to the various establishments of the Board during the ensuing twelve months.

The medical men of St. Anne's still refuse to apply for the medical officership to the Fylde Board of Guardians, although the salary has been increased 15l. per annum. At the meeting of the guardians on December 26, the general opinion appeared to be that the amount of work involved did not justify a greater increase, and no further action was taken in the matter.

Frank Gibbs, grocer, Tiddington, was fined 1l., and 8s. 6d. costs, at Stratford-on-Avon on December 23, for selling milk of sulphur containing 49 per cent. of sulphate of lime. The prosecuting inspector said he understood that the drug was supplied to a previous owner of the business by R. Judd, who travelled round the villages, representing himself as a manufacturing chemist.

At Heaton Norris, on December 24, an inquest was held respecting the death of Amelia Greenshields, who had been treated for tumour by outward application by F. Rawlings, herbalist, of Reddish. Rawlings was recently committed for trial, on a coroner's warrant, on a charge of manslaughter in a cancer-case, but the grand jury at the Assizes threw out the bill. Medical evidence in the present instance showed that whilst the treatment might have hastened death it did not actually cause it. A verdict of death from natural causes was returned, the Coroner remarking that it seemed to be of no use sending Rawlings for trial for manslaughter.

### The Sale of Chlorodyne.

At an inquest held at St. Bartholomew's Hospital on December 23, several of the jurymen commented on the present system whereby any person can obtain deadly quantities of chlorodyne without any inquiry being made. The inquiry related to the death of a bootmaker, named

Tewkesbury, who, on being given notice to quit his premises, went to a chemist's close by and purchased some chlorodyne, which he took. The house physician at St. Bartholomew's stated that the deceased was admitted suffering from the effects of opium-poisoning, but he recovered from that. He, however, had also blood-poisoning, which increased owing to the weak state the deceased was reduced to by the effect of the opium, and ultimately died.

A Juror: Can chlorodyne be purchased by anyone just as carbolic used to be?

Witness: Yes, but the bottle would be labelled "Poison."

The Coroner: Is it not a scheduled poison, then?

Witness: I cannot answer that off-hand, but I think not.

A Juror: Was this Dr. Collis Browne's?

Witness: No. It was made up by the chemist himself, and I wrote to him as to the prescription, and he answered me that it was made up in strict accordance with the B.P., with the exception that only half the quantity of morphia was used.

A Juror: I fail to see the sense of a poison-label if any person can buy it readily. I advocate that no poison should be obtainable except in proper form from professional men, having a direct personal knowledge of the purpose for which it is to be used.

The Coroner: But it is largely sold for medicinal purposes.

The Juror: It should not be allowed to be sold except by a doctor's prescription. It is a farce to restrict one poison and not others. (Hear, hear.)

Another Juror: Can any person go into a chemist's shop and buy chlorodyne, and not be questioned as to his or her object?

Witness: I know nothing to the contrary, and believe that it is so obtainable.

The Juror: Then if I want to poison my household I have only to buy chlorodyne?

The Coroner: The chemist might restrict the quantity you bought.

The Juror: But I could go into a dozen shops and get a little at each. (Laughter.) Could a person poison himself with a bottle of Dr. Collis Browne's?

The Coroner: We cannot go into that.

The Juror: I only mean it because I have bought a dozen bottles of that at a time, so that sale is not very strict.

Witness: That is a patent medicine, and possibly not so deadly.

The Coroner remarked that it seemed a loose system, but then the Pharmaceutical Society had long had the question of restricting the sale of drugs under close investigation, and the new century will probably see all poisons put under proper control.

### The Week's Poisonings.

The reaction following upon the festive season seems always to produce an unusual crop of suicides. A very fair proportion of the great number recorded during the past week were caused by poisons, eighteen poisoning fatalities being reported, most of which were suicides. Besides the three hydrochloric-acid cases and the nicotine case reported elsewhere, the only other unscheduled poison which caused death was naphtha, accidentally taken by a little girl at Stockton. In three cases oxalic acid was the fatal medium, chloroform was responsible for a like number, laudanum for two, and carbolic acid for one only. Belladonna liniment was swallowed by a workhouse inmate at Gateshead with fatal results, and the rather rare incident nowadays occurred at Luton of two women mistaking aconite for horseradish. The aconite was cooked and eaten, one of the women dying as a result.

### The Carbolic Successor.

During the past week three inquests have been held on persons who have been poisoned by hydrochloric acid. The wife of a porter in the Westminster district committed suicide with the acid on Christmas Eve, and the jury returned a verdict of suicide while insane, evidently without inquiring as to where the poison was obtained.—At the inquest on the body of a Sevenoaks engine-driver named Gollop, who drank some "killed" spirits of salt from a ginger-beer bottle in mistake for that harmless beverage, it was stated that deceased was taken to the residence of Dr. Daunt (a medical man who had ceased practising), who



sent him to a chemist's. The man was conveyed to Mr. R. Barrat's pharmacy, where he was attended to, but died the next day. The Coroner (Mr. Buss) referred to the careless manner in which persons kept such poisons, and advocated the universal use of distinctive poison-bottles (one of which he exhibited), in order that such mistakes should be avoided. The jury added to their verdict a rider that there should be a more effective, protective, and easily distinguishable form of bottle adopted generally, in which such poisons should be kept.—The adjourned inquiry at West Ham was held on December 24, relative to the death of a woman who committed suicide by taking spirits of salt, which she had purchased from an oilman's shop at Barking (*C. & D.*, page 1017). It transpired that the poison was supplied to the woman in a whisky-flask, and Dr. G. Shilling, house surgeon at West Ham Hospital, said such poisons ought to be scheduled. The jury, in a rider, recommended that hydrochloric acid should be included in the scheduled poisons.

#### Dental Sponges cause Death.

An inquest was held at Newport-upon-Usk on December 31, touching the death of a collier named William Finney, aged 21. Mr. H. W. Griffiths, surgeon-dentist, stated that the deceased came to his place on the previous Thursday for the purpose of having some teeth extracted. On examination witness found that it would be necessary to remove eleven teeth. With the aid of nitrous-oxide gas, mixed with ether, the operation was easily and successfully performed in about three minutes, and deceased was afterwards sitting listlessly in the chair, when about two or three seconds after the last of the teeth had been extracted, he sprang up and drew a deep breath and gasped. Seeing this, Mr. Griffiths felt for an obstruction in the throat, but could find none, and began to use the means for artificial respiration. He sent for Dr. Vines, who also felt for an obstruction, but could find none. They tried the usual means for restoring respiration for an hour, but without success. On the following day Dr. Vines made a *post-mortem* examination, when he found that one of the sponges used for mopping up the blood in the jaws after the teeth had been extracted had been drawn deep down into the windpipe, and as there was a trace of old pleurisy, deceased was unable to cough and expel the obstruction. Mr. Griffiths's attendant (Nurse Walsh) said she believed that she had taken out all the sponges from the jaw. The jury returned a verdict that death was due to misadventure.

#### Poisoned by Nicotine.

At an inquest held at Birmingham on December 31 on the body of a commercial traveller, named Barr, who was found dead in a hotel-lavatory, it was stated that two bottles, which had contained some poisonous liquid, were found near the body. The widow identified the bottles as having contained a liquid which deceased used for fumigating plants. The medical evidence showed that the cause of death was poisoning by nicotine, which was the active ingredient of the small quantity of the fluid left in the bottles.

#### Swallowed Box and All.

At Scarborough on New Year's Eve, a woman named Mrs. Barnes, 71, was found lying in the street gasping for breath, and to all appearance in a dying condition. She was removed to the hospital, where the doctors administered an emetic. As a result the woman ejected a cold-cream box about 1 inch in diameter and  $\frac{1}{2}$  inch thick, full of cold-cream.

#### Not Poisoned with "Daisy."

At the Lewisham Coroner's Court on December 23, an inquiry into the cause of the death of a laundress named Edith Skipper, aged 16 years, was concluded. On November 21 deceased was taken suddenly ill at her work, and complained of headache and earache. A "Daisy" powder and some pills were procured for her, which it was thought she took. She became worse, and died the same day. At the opening of the inquest Dr. Hulbert, of Catford, stated that he made a *post-mortem* examination and found traces of an irritant poison, but he could not say what the particular poison was. Consequently the contents of the stomach were analysed by Dr. F. Womack, who now stated that he had

found 3 gr. of oxalic acid in the stomach, which had caused death. In reply to the Coroner, a fellow employee of the deceased's said no chemicals were used in the laundry, and she had not seen any bottle about which could have contained oxalic acid. The jury returned a verdict that the deceased committed suicide by swallowing a quantity of oxalic acid whilst temporarily insane.

#### Birmingham Bits.

No fewer than six apparently different chemists' businesses have been advertised for sale in the daily press during the past week, in two instances the words "at once" being added.

The premises where the shop of Messrs. G. Almer & Co., chemists, stands are shortly to come down. The proprietors of this business are Messrs. Gould & Bridgwood, who also have a high-class pharmacy at Handsworth.

Mr. Barlow, chemist and druggist, a well-known breeder of dogs, had a narrow escape of great loss, owing to the plague of waters last week, for round about his kennels the land was submerged by the "Rea" overflowing its banks.

The chemist and druggist classes held at the Technical School on Wednesday afternoons are fairly well attended. Of first-year students there are about fifty, and of second-year about fifteen, but of the third-year no record is forthcoming.

The Birmingham Chemical and Metallurgical Club are inviting new members representative of every phase of chemical activity. The annual subscription is a nominal fee of 2s., and the Hon. Secretary is Mr. J. H. Millar, 64 Francis Road, Edgbaston.

#### Leeds Notes.

During 1900 there has only been one failure of a chemist and druggist recorded within the extensive jurisdiction of the Leeds Bankruptcy Court.

The Leeds City Council last week increased the salary of Mr. William Hudson Harrison, chemist at Knostrop Sewage Works, from 150% to 200% for one year, with a further increase to 250% per annum on January 1, 1902.

An epidemic of ringworm is creating a good deal of business for Kirkstall chemists just now. The customary method in that district on such occasions, it appears, is for parents, when the first spot appears, to send to the nearest chemist for a pennyworth of vaseline. "The vaseline, as a matter of fact," said one chemist who had had a dozen ringworm cases in his place that morning, "aggravates the disease rather than cures it, if parents would only realise it." Hence increased business follows.

Recently some chemists and druggists in this district have received postcards to the following effect:—

A drug-store company, desiring to increase the number of its branches, is prepared to enter into negotiations with Leeds chemists for the purpose of amalgamation of their businesses on the basis of the vendor being engaged as salaried manager and holding shares in the company. Address, for full particulars, Syndicate, c/o Mr. Smith, &c.

Who is the "company"? Inquiries for information sent to the address given have not been replied to.

A chemist named John Fryer (43), of Upper Mill, Oldham, pleaded guilty at Leeds, on December 31, to unlawfully wounding a schoolmaster named Kershaw, and was fined 10% and costs, or three months' imprisonment in default. From the evidence given at the trial it appeared that Fryer's boy had been gying the schoolmaster, who seized the boy and locked him up in his school. Fryer went to Kershaw and demanded that the boy should be liberated, and in the course of the quarrel Fryer struck the schoolmaster with a walking-stick. The defence was that Fryer acted under great provocation from Kershaw, and that the stick used was only a light one.

#### West of England Notes.

Messrs. Hodder & Co. (Limited) have opened their new branch in Whiteladies Road. The shop is double-fronted, is fitted in the most luxurious style, and well adapted for the fancy-goods business in addition to that of pharmacy.



Mr. H. E. Matthews, pharmaceutical chemist and the holder of half-a-dozen "Square" medals, has recently issued a very neat little "brochure" from the Mall Pharmacy, Clifton, Bristol. A striking feature about this "brochure" is that the scientific side of pharmacy is well to the front.

The discussion regarding the unqualified dispenser does not affect this part of the country in any way. It is the exception rather than the rule to find a medical man who does his own dispensing, hence the relations between chemist and doctor are much more amicable than they otherwise might be.

#### Stealing from Chemists.

At Droxford on December 28, Charles James Blake was fined 30s., or in default 21 days' hard labour, for stealing 2s. 9d. belonging to Mr. W. T. Gorfett, chemist and druggist, Hambledon. Prisoner lifted the money from Mr. Gorfett's counter, where it had been placed by a previous customer.

Two men, named John Nelson and Wm. Henry Lane, described as enamel-letter fixers, were sentenced to three months' hard labour by the Grimsby Magistrates on December 24 for stealing enamelled letters from the windows of Mr. F. Helsby's pharmacy at 220 Freeman Street, Grimsby.

#### Fires.

A fire was discovered on December 28 on the premises of Messrs. Tribe & Lamb, chemists and druggists, at 211 High Street, Chatham, but it was speedily extinguished, the only damage done being caused by smoke and the water. This is the second outbreak of fire at these premises.

On December 24 a quantity of turpentine which was being mixed with other ingredients on a gas-stove in the shop of Mrs. Chamberlain, chemist and druggist, Church Street, Warrington, ignited and set fire to the pharmacy. The outbreak was subdued, however, before serious damage was done.

A destructive fire occurred on December 28, at 70 Kennington Park Road, S.E., on the premises of Mr. W. Freeman, manufacturer of Freeman's chlorodyne. The fire originated in the back of the building, and for a time raged furiously creating much damage. Mrs. Freeman was burnt on the hands.

On December 29, while Mr. E. Collingwood, manager for Mr. M. W. Carmichael, perfumer and manicurist, at 158 New Bond Street, W., was preparing an explosive compound, the vapour became ignited, and a fire ensued which practically burnt out the establishment. The caretaker and his wife had narrow escapes, and Mr. Collingwood's hands were severely burned.

#### Football.

On New Year's Day a strong team of the druggists' sundries department ("Dreadnought") of Messrs. Evans, Sons & Co., Liverpool, was pitted against the pick of several other departments, and called for the nonce "De Wets." There was a great concourse of the firm's employes and friends present, and a capital game was witnessed. Hanoverians, 2 goals; De Wets, 1 goal. The names of the players were, "De Wets" team:—Messrs. Smith, Conboy, Sage, Henshaw, McKie, Speakman, Lloyd, Kynsey, McKie, Roberts and Price, "Dreadnought" team:—Messrs. Duncan, Price, Shaw, Connolly, Harper, Jones, Alston, Bellingham, Collins, Curley, and Lawrence. The referee was Mr. T. Critchley.

#### Exeter City Analyst.

At a meeting of the Exeter City Council on January 2 the sanitary committee recommended that Mr. C. G. Moor be asked to send in his resignation of the post of public analyst as from January 1, and that a special meeting be convened to consider the whole question of the salary and duties of the public analyst. The report was adopted. Mr. Moor is going out to Ashanti on behalf of a gold-mining company.

#### An Object-lesson.

On Thursday, December 20, 1900, the students of the Liverpool School of Pharmacy, to the number of 40, were, through the courtesy of the United Alkali Company, permitted to visit their Gaskill Deacon's works at Widnes. The

visitors were conducted through the works by the sub-manager, who detailed, step by step, the various processes in the manufacture of sulphuric acid, soda-crystals, chlorine by Deacon's process, bleaching-powder, &c. They were fortunate in seeing a sulphuric-acid chamber in course of construction. A thoroughly interesting and instructive afternoon was passed.

#### Koko Caught the Crowd.

At Marlborough Street Police Court on January 2, Minnie Brown was summoned for obstructing the footway by causing a crowd to assemble in Regent Street. The police evidence was to the effect that a crowd of between 130 and 140 persons were standing on the footway gazing at several young women with very long hair hanging down their backs, who were sitting inside the window at 113 Regent Street, for the purpose of advertising Koko, a hair-preparation. A police-sergeant spoke to Miss Brown about the obstruction, but the offence was continued. The Magistrate said the obstruction was an intolerable nuisance, and a fine would be imposed for every day it continued. Defendant was fined 40s. and 2s. costs.

### Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

#### The Analyst's Salary.

The question of the analyst's salary arose at the last meeting of the Cork County Council. It was thought that the analyst should do analyses for the police for nothing, and the matter was referred to the Finance Committee for report.

#### Dublin Fire.

Sir Chas. Cameron's laboratory in Castle Street, Dublin, was nearly burnt down on December 29. The caretaker fortunately discovered the fire early, and the vigorous efforts of the fire brigade resulted in confining the outbreak to a part of one floor of the building.

#### Dispensary Analyses.

At the last meeting of the Guardians of the South Dublin Union, the Local Government Board forwarded the report of their medical inspector, Dr. Edgar Flinn, on his recent inspection of the dispensary districts of the Union, and regretted to observe that the regulations respecting the analysis of drugs, and the forwarding of medicines for analysis, had been disregarded in practically all the dispensaries.

#### Too Poor to Pay.

On December 28 the Dublin City Coroner held an inquest on the body of a nine-weeks old infant, who died suddenly. Catherine Everard, mother of the child, stated that on December 15, the child being unwell, she took it to Dr. Leonard's Medical Hall, Great Britain Street. She there saw Dr. McWalter, who prescribed for it. Not having 1s. 6d. to purchase the medicine prescribed, she got twopennyworth of "squills," which she administered to the child. Dr. McWalter stated that when the child was brought by its mother to his place it was delicate and threatened with convulsions. He prescribed for it, and handed the mother the prescription. He heard nothing more about the case until the mother called for a death-certificate. He then inquired of his assistant if the woman had got the medicine he had prescribed. As she had not, he refused to give a certificate. He told the woman to get the medicine made up in the shop. The mother was recalled, and stated that she had told the doctor that she had no money. The jury returned a verdict that death was due to cardiac syncope consequent on lung-disease.

#### Contracts.

The Cork Chemical and Drug Company (Limited) and Messrs. Davis, Goodall & Co., Newcastle-on-Tyne, have been appointed contractors to the Cork Corporation for the supply of sanitary requisites and disinfectants.



**Analyst Appointment.**

The Lord Lieutenant has directed that Mr. Robt. Barklie, F.C.S., M.R.I.A., public analyst for the city of Belfast, co. Antrim, co. Tyrone, co. Donegal, &c., be employed as analyst on behalf of the Government in Belfast, Antrim, and Northern Counties, or where the services of an analyst resident in Belfast are thought desirable.

**Scotch News.**

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

**Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association.**

At the meeting held in the Institute, Scott Street, Glasgow, on December 26 (Mr. J. P. Taylor presiding), Mr. J. P. Gilmore gave a lantern-lecture, illustrated by ninety slides, on the races of mankind.

We are asked to state that this Association has not authorised any person to solicit advertisements for the annual report. We are also informed that the Association has instituted legal proceedings against the publisher of the first annual report for breach of contract.

**Doctors' Shops.**

The Glasgow Southern Medical Society has agreed to appoint a committee to draw up a representation to the General Medical Council on the subject of the Council's recent decision regarding the sale of drugs and poisons by unqualified assistants, to call a meeting of Glasgow and West of Scotland medical practitioners to consider the Council's decision, and to petition for additional representation from the West of Scotland on the General Medical Council.

**Aberdonian Fruit-wine.**

An Italian restaurant-keeper was fined 5*l.* and costs at Aberdeen, on December 29, for shebeening. When the police raided the premises several quarts of whisky labelled "fruit-wine" were found amongst a number of empty beer-bottles.

**An Incendiary Charge.**

A young man named Frank Roberts, described as "formerly a chemist in Cupar," has been remanded on a charge of wilful fire-raising in a dwelling-house in that town, with intent to defraud an insurance company. The fire in connection with which Roberts is charged was one of five fires which occurred within ten days in Cupar.

**ZnSO<sub>4</sub> *vice* MgSO<sub>4</sub>.**

The housekeeper at Blackcraig Farm, Kirkcudbright, Elizabeth Macdonald by name, took a dose of "white vitriol" on December 28, in mistake for Epsom salts. The Kirkcudbright doctor who was called in found the case somewhat serious, but Macdonald has rallied slightly since.

**French News.**

(From our Paris Correspondent.)

**PROTECTING THE DOCTORS.**—The Paris Court of Cassation has just decided that an exponent of animal magnetism who purported to effect cures by magnetic passes, without possessing a medical diploma, illegally practised medicine.

**THE DYSENTERY-MICROBE.**—It is stated that Dr. Gay, a member of the medical expedition sent out to Manila two years ago, has, while working at the Pasteur Institute with Dr. Flexner, succeeded in isolating the germ of dysentery, and will soon be prepared to introduce an antitoxin.

**FRENCH COMMERCIAL TARIFF.**—The Minister of Commerce has informed the British Chamber of Commerce at Paris that a decree is being prepared postponing for a further period of six months from January 1, 1901, the

application of the law applying the maximum tariff to tea, coffee, and other colonial produce. The provisions of this decree apply to all countries except Venezuela.

**INGENIOUS BLACKMAILING.**—It appears that certain agencies for the sale of pharmacies in France have recently been endeavouring to add to their incomes by applying to pharmacists in localities where there appears to be an opening for competition, threatening to start a new pharmacy in opposition to those already established unless a stipulated sum of money is paid in cash. The police have taken the matter up, and it is likely that these enterprising gentlemen will be prosecuted.

**HIGHER TAX ON ALCOHOL.**—The French Senate passed a law on December 29, 1900, with the object of reducing the taxes on so-called "hygienic beverages," such as wine and cider, and considerably increasing those on spirits, liqueurs, and all other alcoholic liquids not denominated. This includes perfumery, and I hear that the French perfumers are contemplating an immediate increase in the price of perfumes, though this applies only to those sold in France, as there is the usual drawback allowed for the export trade. The new law came into operation on January 1, and the Excise authorities issued notices on December 31 to all firms selling alcoholic products, requesting a detailed declaration of the alcohol in their possession on the former date, in order that the tax may be claimed. The new duty is announced as 2*fr.* 20*c.* per litre, and a fine of three times that amount will be incurred by non-declaration. In course of the discussion on the law attention was called to the fact that the Government is given the right of prohibiting the sale of any essence of which the manufacture, distribution, or sale has been announced as dangerous by the Paris Academy of Medicine. M. Poirrier said this article had caused a sensation amongst manufacturers of essences for perfumery. The Minister of Commerce replied that it did not apply to them, but only to essences intended for any sort of beverage. There was some doubt as to whether the tax applied to medicinal preparations, but from inquiries I have made at the Pharmacie Mialhe (M. Petit's pharmacy) they assure me that all tinctures or medicines of any kind into which alcohol enters will be submitted to the new duty. It is announced as 2.20*f.* per litre of pure alcohol, but the increase only amounts to 64*c.* (a little over 6*d.*) per litre.

M. ALFRED RICHE was elected Vice-President of the Paris Academy of Medicine last week. He has been a member of the pharmacy section of that body since 1871, and is well-known to pharmacists through having been for many years professor of mineral chemistry at the Paris School of Pharmacy. He is now an honorary professor of the school. His leading appointment, however, is that of director of assaying at the French Mint. At the International Congress of Applied Chemistry held in Paris last July, Mr. Riche was the official delegate of the French Minister of Commerce; he also presided over Section VIII. (hygiene, medicinal, and pharmaceutical chemistry) of the Congress. The high esteem in which he is held in the Paris scientific world is shown by his recent nomination, which is the stepping-stone to the President's chair of the Academy of Medicine next year.



M. ALFRED RICHE.

DURING 1899 135 tons of beeswax and 64,506 gals. of honey were exported from the Dominican Republic.



## South African News.

(From our Cape Town Correspondent.)

**FIRE.**—A fire occurred on the premises of Messrs. Cresswell, Sons & Co., sponge and chamois merchants, Bree Street, Cape Town, on December 10. The stock was entirely destroyed, while the building itself was gutted. When the mail left the extent of the damage had not been ascertained.

**PERSONAL NOTES.**—Mr. J. G. Mocke has opened a branch drug-store, under the name of "International Dispensary," in Mill Street, Cape Town.—The Gardens Dispensary, owned by Dr. Impey, has been placed in charge of Mr. J. Sharpe, a Scotch chemist.—Mr. T. W. Dukes, of Johannesburg, has arrived in Cape Town from Europe. He intends proceeding to Natal, where he will remain until the Rand opens up.

**BUSINESS ON THE RAND.**—It is reported that no civilians will be allowed back on the Rand for the next six months, women and children and strangers much longer. Lord Kitchener has said that everyone who goes to Johannesburg, meanwhile, must go as a soldier, with a rifle in his hand. Every male inhabitant of the Rand, between the ages of 18 and 50, must be a member of the Johannesburg Rifles. The majority are very pleased with these conditions. The fighting is not nearly over. One cannot walk five miles from the railway in the Transvaal without getting shot at, and the telegraph-wire is cut in one or more places every night. The same almost applies to the railway.

**VINEGAR PROSECUTION.**—At Cape Town Police Court on December 1, Messrs. H. A. Barn & Co. and Mannucci & Co. (Limited), were charged under the Food and Drugs Act with supplying vinegar which in the opinion of the Government analyst was not the product of acetous fermentation of a vegetable infusion or decoction as required by law. For the defence in the case of Messrs. Barn & Co., Dr. R. Marloth, analyst, said the vinegar was free from mineral acids and other substances injurious to health, and contained 3.42 per cent. of acetic acid, and was consequently a pure and wholesome vinegar of proper strength. The magistrate did not think the offences serious, but technically defendants were guilty, and in each case a fine of 10s. was imposed.

**A BELATED DRUG-PROSECUTION.**—On December 7, at the Wynberg Police Court, Mr. Henry P. C. Brennan, branch manager of Messrs. Lennon (Limited), at Wynberg, was charged with selling to an inspector under the Food and Drugs Act adulterated Gregory's powder. The certificate of analysis showed that the sample was adulterated to the extent of 66 per cent. with magnesium carbonate. The accused pleaded guilty, but, in view of the fact that a fine had been inflicted at Cape Town against the company, and that they had immediately withdrawn from the market the powder after the decision of the Magistrate there, the case was dismissed. The purchase of the sample was effected, it transpired, about the time when the Cape Town prosecution was instituted.

## East Indian News.

BOMBAY: December 19, 1900.

**THE INDIAN COMPANIES ACT.**—A Government of India resolution on the working of the Companies Act shows that there has been a decrease of 77 in the number of companies formed during the financial year just ended. The decrease represents 1,437,830r. in nominal, and 1,601,740r. in paid-up capital.

**PROFESSOR WILLIAM RAMSAY**, of University College, London, who arrived in Bombay on December 8 to organise the Tata Research Laboratory, has visited Professor T. K. Tajjar's Techno-Chemical Laboratory at Girgaum. Some of the students at this institution are engaged in higher analytical work.

**A NEW CEMENT.**—Repeated attempts have been made, extending over many years, to manufacture a white cement, having a basis of white magnesia. There are large deposits of magnesia in Southern India, and Messrs. Arbuthnot & Co.,

at their Madras Portland-cement Works, have now succeeded in manufacturing a perfectly white cement for plastering walls, which takes a polish like marble.

**PERSONALITIES.**—Mr. and Mrs. C. W. White, Mr. W. J. Carter (Messrs. Treacher & Co.), and Mr. A. I. Pile (Hunyadi Janos) returned to Bombay this week.—Mr. Norman S. Rudolf, resident representative for Parke, Davis & Co., is here, as are Drs. Rockfuss and McLean (from New York)—two medical men who will, while in India, strengthen Mr. Rudolf's hand by interviewing medical men on behalf of Messrs. Parke, Davis & Co.

**SALTPETRE IN INDIA.**—Mr. J. E. O'Connor, Director-General of Statistics, in a report on mineral production in India, states that saltpetre, which is largely produced for export, was in former years of much greater importance than now, the decline in its employment for gunpowder and the preservation of food having led to a restriction of production. The average production, of which the bulk is made in Behar, amounts to only about 250,000 cwt.; of this a considerable proportion is exported after refining in Calcutta.

## Trade-Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1s., obtainable through any money-order office.

(From the "Trade Marks Journal," December 19, 1900.)

"KATCHO" (no claim for "Catch"); for beetle-traps. By R. Loesch, 199 Coldharbour Lane, Brixton. 231,651 and 232,838.

"MOLASSINE" (no claim for "Molasse"); for food for animals By F. Livingstone, 36 Mark Lane, E.C. 232,390.

Device of a shamrock; for essences, powders, extracts, and chemicals. By Duckworth & Co., Chester Road, Manchester. 233,623.

"LEM-UN-O-CUM" (no claim for "Lemon" or "Lemun"); for aerated waters. By J. Smith, Water Street, Chorley. 233,759.

"STELLIN"; for benzine. By Cudell & Co., 3 Roon Strasse, Aachen. 227,594.

Device of five leaves in circle and the word "DANDERINE" (the essential particulars); for a scalp-preparation. No claim for "Dander." By the Knowlton Danderine Company, 269 Dearborn Street, Chicago. 231,304.

"NETROL"; for toilet-preparations in Classes 48 and 50. By the Netrol Syndicate (Limited), 93 Aldersgate Street, E.C. 233,546 and 233,547.

"CLENOLA" (no claim for "Clean"); for a hair-preparation By G. Storton, 106 Wellington Road, Northampton 234,003.

(From the "Trade Marks Journal," January 2, 1901.)

"MAGLACTIS"; for a medicine. By Oppenheimer, Son & Co' (Limited), 179 Queen Victoria Street, E.C. 234,129.

"MILKMAID"; for perfumed toilet-soap. By Wm. Anderson, jun., 166 Buchanan Street, Glasgow. 234,332.

Device of hand holding leaf-spray; for perfumery and toilet articles. By Raimes & Co., 24 Prince Regent Street, Stockton-on-Tees. 234,761.

Device of circular jar and flames, "Spiratine" and "Alcoholine"; for artificial fuel. By Spiritine (Limited), 5 Carteret Street, Westminster, S.W. 232,496.

A MEMORIAL bust of Dr. Edward Divers was unveiled at Tokio on November 17. The bust has been subscribed for by Dr. Divers's friends and pupils, and is erected in front of the Science College of the Tokio Imperial University. Mr. E. W. Tilden, son-in-law of Dr. Divers, was present, and thanked the committee for their courteous expression of appreciation of Dr. Divers's services.



## New Year Honours.

THE list of honours conferred by her Majesty the Queen on New Year's Day comprises the names of several medical gentlemen, and one pharmacist.

Dr. Thomas Barlow, F.R.C.P., physician extraordinary to the Queen, and Dr. William Selby Church, F.R.C.P., President of the Royal College of Physicians of London, have been created baronets. Sir Thomas Barlow received his medical education at University College and graduated M.D. and B.S. at the University of London with honours in 1873, having six years previously graduated as B.Sc., while in 1871 he took the M.R.C.S., England. In 1874 he took his M.D. and in the same year received the membership of the Royal College of Physicians; this marked his entrance into the consultant ranks. He was elected a Fellow of the College in 1880. Sir Thomas Barlow is an authority on the diseases of children, but it is to clinical medicine generally that his professional life has been devoted, and he is professor of that subject at University College. Sir W. S. Church is erroneously stated in the official list to be an F.R.C.S. He was educated at Oxford University and St. Bartholomew's Hospital Medical School. He graduated as M.B. at Oxford in 1864, and the same year became a member of the Royal College of Physicians, London. In 1868 he took his degree of M.D. at Oxford with a thesis on hytids of the liver. At one time he was Lee's reader in anatomy at Christ Church, Oxford, and is a physician to St. Bartholomew's Hospital. He became a Fellow of the Royal College of Physicians in 1870, acted as censor of the college in 1891-92, and was appointed senior censor in 1896, vacating that appointment to become president of the college two years ago. He represented the University of Oxford on the General Medical Council for ten years from 1889, resigning on June 6, 1899.

Sir William Turner, D.C.L., F.R.S., President of the General Medical Council and Professor of Anatomy in the University of Edinburgh, is made a K.C.B.

Dr. Hugh Adcock, C.M.G., is to be knighted. He is the leading medical practitioner in Teheran, Persia, and consulting-physician to the Shah of Persia. He rendered valuable service during the severe epidemic in that country in 1892. Sir Hugh Adcock is a Guy's Hospital man and took the L.S.A. diploma and L.R.C.P., Edinburgh, in 1869, also taking M.R.C.S. Eng. in 1871. It is noteworthy that he is referred to in the official list as Dr. Hugh Adcock, and that others in the list who simply hold diplomas are similarly entitled.

Dr. Maximilian F. Simon has received the K.C.M.G. on his retirement as principal Civil Medical Officer of the Straits Settlements. Sir M. F. Simon is one of the leading practitioners of Singapore. He obtained the diplomas of the Royal Colleges of Physicians and Surgeons, London, thirty years ago, and in 1894 graduated M.D. at St. Andrews University.

Col. Herbert Jekyll, C.M.G., who acted as secretary to the British Commission at the Paris Exhibition, is promoted to the knighthood of the Order. Col. Jekyll has been connected with the Royal Engineers since 1866, and served in the Ashanti war of 1873-74. He acted as private secretary to the Earl of Carnarvon when Colonial Secretary in 1876-78, and again when the Earl was Lord-Lieutenant of Ireland in 1885-83. He has acted in other official capacities, and was Secretary of the Royal Commission of the Melbourne Exhibition in 1887-88. His assistants at the Paris Exhibition, Mr. E. R. Spearman and Mr. Lionel Earle, have received the C.M.G.

Dr. Arthur Neve, L.R.C.P., F.R.C.S., Church Mission Society, Srinagar, Cashmere, has received the Kaiser-i-Hind gold medal for public service in India. He is an L.R.C.P. and F.R.C.S., Edinburgh.

Major John Crimmin, V.C., Indian Medical Service, receives the C.I.E. Major Crimmin is an Irishman. He obtained the L.R.C.S.I. in 1879 and L.R.C.P.I. two years later. He is one of twelve medical officers who have received the V.C. It was awarded to him on account of gallantry in the Burma campaign of 1889.

The Lord-Lieutenant of Ireland has announced his intention of conferring the honour of knighthood upon Mr. Edward M. Hodgson, J.P., M.P.S.I., who is a well-known

merchant in the City of Dublin, being Chairman of the Rathmines and Rathgar Urban District Council. He is one of the partners in the well-known firm of McMaster, Hodgson & Co., wholesale and retail chemists, Capel Street, and Ashtown, co. Dublin. Both in private and public life he is deservedly e-teemed for his upright and honourable qualities. Sir Edward is the third representative of the pharmaceutical and allied trades in Ireland honoured with the dignity of knighthood, the two others being Sir James H. Haslett (Belfast) and Sir Thomas W. Robinson (Kingstown).

## Business Changes.

Notices are inserted free in this section if properly authenticated.

MR. G. P. COOPER, chemist and druggist, is opening at 5 Anchorfield, Newhaven, Leith.

MR. JOHN JOHNSTONE, chemist and druggist, has commenced business at 118 Spring Gardens, Abbeyhill, Edinburgh.

MR. HAROLD H. MAIDMENT, chemist and druggist, has purchased the business of Messrs. Ballard & Co., Faringdon, Berks.

MR. C. J. CHILDS has purchased the business carried on for many years at Guildford, by Mr. A. J. T. Long, pharmaceutical chemist.

MR. VICTOR J. WOOLLS, chemist, of Cecil Square, King Street, and Cliftonville, Margate, will shortly open a branch at Westgate-on-Sea.

MR. W. R. COOK, pharmaceutical chemist, has purchased the business lately carried on at 52 King's Road, Brighton, by Mr. H. H. Maidment.

THE style of the firm of Messrs. Kirkpatrick, Barr & Guthrie, 4 Cullum Street, E.C., has been changed to "Messrs Kirkpatrick, Barr & Paton."

THE registered offices of May's Drug-stores (Limited) have been removed from 251 Winchester House, E.C., to New Broad Street House, New Broad Street, E.C.

MR. J. R. PARKER, chemist and druggist, of T. & J. R. Parker, 9 Bridge Street and 3 Blossom Street, York, has taken over the Blossom Street business entirely, Mr. T. Parker retaining the business in Bridge Street.

MR. THOMAS EDWARD LESCHER, eldest son of Mr. F. H. Lescher, and Mr. Harold Edward Webb, eldest son of Mr. E. A. Webb, have been admitted as partners into the firm of Evans, Lescher & Webb, 60 Bartholomew Close, E.C.

MESSRS. MELCHERS, RUNGE & Co., merchants, 1 Fenchurch Avenue, E.C., announce that Mr. G. Friesland has decided to retire from business for reasons of health. Mr. Wm. Fischer has been authorised to sign for the firm by procuration.

MR. W. H. LAMBERT, pharmaceutical chemist, of Newtown, North Wales, has opened his new premises in Cross Buildings. The entire shop-fittings and recess shop-rounds have been supplied in first-class style by Messrs. Evans, Sons & Co., Liverpool.

WHY is a tramp who comes into the shop and tries to steal a bottle of perfume like Tommy Atkins?—Because he is a nab scent minded beggar.—H. S. GREEN.

THE WORST CASE.—The village apothecary is likewise very often the village encyclopædia, and in disputes he performs the duties of chief arbiter. A discussion had arisen regarding famous poisoning-cases, and as the disputants could not agree as to which was the most important, a note was despatched to the chemist as follows:—"Dear Sir,—Will you be so kind as to complete the following sentence, and return by bearer—viz.: 'The most important poisoning-case of the century was——'" The lad duly delivered the note, and in a short time returned with the answer, which now read as follows:—"The most important poisoning-case of the century was when carbonate of soda and iodide of potassium."



## "Army Compounders."

### A Golden Opportunity.

By JOHN GIBSON, F.C.S., M.P.S.

A NEW CENTURY, a new Parliament, and a new Pharmacy Bill, are items of deep interest to us, and we wish during this year to impress upon the legislators of the land our claim to proper legal recognition, and seek proper protection for titles implying pharmaceutical examination, so that the public may not be misled by corporate bodies adopting titles which they have not earned. During this year, and in the new Parliament, we wish to secure that recognition which we believe to be due to us from the Legislature, which imposed compulsory qualification upon us in the Pharmacy Act of 1868, which embodied principles that have been adopted in every other pharmacy measure brought forward, and passed, by the various legislative bodies throughout the British Empire. One other matter I think it desirable should not be overlooked—viz., that it is the duty of the State to see the military compounders in exercising duties equally responsible with those of civil compounders, should possess similar legal qualifications.

We are told that the Government has pledged itself to a drastic scheme of military reform. Here a golden opportunity presents itself not only to the chemists of Great Britain and Ireland, but of the whole Empire, of laying before the Imperial Parliament the just claim that military compounders should have status, position, rank, and remuneration accorded to them by the military authorities, so that the military service will be open to the best of chemists. The military authorities always have in the past, and it is safe to say, always will in the future require compounders. If previous Governments have neglected to see that the men who fulfil the duties of compounders of medicines, and other duties imposed upon compounders in the military service, have not a standard of education, training, skill, knowledge, and qualification equal to that demanded in civil life, it is high time that steps should be taken to arouse an interest in the matter, so that this unsatisfactory state of affairs may be remedied.

We are often told that chemists as a body expect too much from Parliament, and to a certain extent this may be true, but where is there another trade in the land, with the exception of the trade in alcoholic liquors, that is so much affected and controlled by Acts of Parliament? In the same way, we are told that individual effort and character can accomplish more than any Act of Parliament, and, to a certain extent this is the truth, but not the whole truth.

The Government of this country in times of war, as has lately been amply shown in these columns, cannot do without the voluntary aid of the chemists of this country, and in times of peace we are well assured that the military compounder is placed upon a footing vastly inferior to the position a man should hold on the medical staff of her Majesty's army. So we may be certain that when the army comes to be revised, and especially the medical staff, chemists will miss a golden opportunity if they do not make every effort to ensure that the military authorities should only employ qualified compounders, and that the Minor qualification of the Pharmaceutical Society should be the recognised standard.

It is not often that an opportunity presents itself to the pharmaceutical world of putting before Parliament a claim for rank in the military service, which the medical profession and veterinary surgeons have held for years. If we succeed, we will have gained another step on the ladder of recognition by the State, and then, when our Pharmacy Bill comes before the Imperial Parliament, members will have already heard something of what is expected of chemists, and the obligations they fulfil to the State in civil life. It is hoped that when the proper time arrives, our leaders and the members of our calling generally, will secure for chemists' compounders in the British army a position not inferior to that held by other military pharmacists in the armies of Europe.

A RECENT TARIFF DECISION holds that sheep-dip powder is free of duty on entry into the United States.

## The R.A.M.C. Criticised.

[We have received from a chemist and druggist of the Transvaal the following scathing article descriptive of the red-tapeism and deplorable deficiencies of the R.A.M.C. in South Africa.]

ABOUT December 1, 1899, when the Boers were investing Kimberley, Mafeking, and Ladysmith, and had entrenched themselves on the northern bank of the Tugela in a seemingly impregnable position, and it was evident to all that they would never be dislodged from their natural fortresses and driven beyond our borders without much bloodshed—not till then did the Royal Army Medical Corps discover that it was totally unfit to cope with the requirements of a modern army in the field against a determined well-equipped foe.

Colonel Gallway, C.B., Principal Medical Officer Natal Army, immediately saw the weakness of his command, and grappled the situation. He ordered all qualified surgeons that could be found to be engaged, the same with qualified chemists and certificated nurses. Afterwards, when no more could be got with diplomas, anyone was engaged who claimed a little experience in one of these professions. He enrolled 500 civilians as hospital orderlies, and sent 1,200 young Randites to the front with the Army at Colenso as stretcher-bearers. These latter were known as Imperial Bearer Corps. Colonel Gallway and they were amongst the few bright spots in the dark days of the campaign. At Colenso, Spion Kop, Vaal Krantz, Pieters, and the battles intervening their services were invaluable. They were in action, under fire, every day for fourteen days before the relief of Ladysmith. When fighting was on they were always in the firing-lines bringing out the wounded. In every battle they did their duty fearlessly. They had no uniform, no kit, no tents. At night (when the regular soldiers had tents) I saw these bearers all asleep on the ground, with the sky as their only covering, like the beasts of the field.

The Civil surgeons performed approximately 97 per cent. of the operations in Natal. I was present on about sixty occasions and never saw a R.A.M.C. surgeon use a scalpel. I was at first surprised, but now understand it. They have secured their sword with tassels and gold lace. What then, say they, is the good of pottering with surgery? The Civil surgeon's pay is 20s. and 7s. 6d. allowances per day (27s. 6d.) and a tent. Hundreds of them are going to the Rand when it opens, to begin practice there. Then, I think, the chemists with experience and capital will hold the best end of the stick. A gentleman's valet, who said "he was a doctor without a diploma," has been drawing 27s. 6d. per day and sleeping in a military tent during the past fourteen months, and is still employed at a military hospital.

It is frequently said amongst the sergeant-majors and quartermasters that "the scientific nursing of an enteric patient was never known in the British Army until this campaign." Most of the nurses are volunteers with certificates from British hospitals and a few good Australasians. I have seen nurses of many nationalities at work, but never any to equal British women from a strict school. I hope those of the R.A.M.C. (male and female) will profit by what they have seen of nursing during the past year. Certainly they are not all past-masters in the art, because, during January, in the desperation of the moment, many were engaged without a certificate and little experience. I know a housemaid from the Grahamstown Hospital, who has been here fourteen months, worked eight months and rested six, all the time drawing full nurse's pay and allowances. Their pay is 6s. with 3s. quarters and 1s. 6d. rations (10s. 6d.) per diem, and a furnished tent, with the rank of captain. The Army Nursing Reserve get still more pay, and a first-class return from London to South Africa.

The first score of Civil surgeons engaged very soon questioned the ability of the army compounders in no measured terms, and by order from the P.M.O. all the qualified chemists obtainable were engaged. Afterwards, as with the other branches, anyone was engaged. These chemists at once took up their duties in the surgeries of the hospitals, on the line of communications, and on the hospital-ships, and gave the greatest satisfaction. All were paid alike—7s. per diem, with rations and quarters. Those who worked the Röntgen rays received about 25l. per month according to the



number of cases; but any expert radiographer who had once been in a surgery was never afterwards allowed to touch the *x*-ray instrument. Living (as I have done during the past year) amongst the R.A.M.C., I had many opportunities of conversing with about thirty compounders and seeing about half of that number at work. It was a painful eye-opener to me to observe plainly that their pharmaceutical training was of the most meagre description, and it was very evident why the Civil surgeons wanted chemists to dispense for them. I will not trouble you with the details of the multitude of atrocities I saw perpetrated under the guise of "compounding," which word I now take as synonymous with "careless ignorance." The ordinary apprentice who has been three months daily at the dispensing-counter under the eye of a qualified man is a far superior dispenser to the average Army compounder. In dispensing a prescription the good apprentice, of course, is taught never to "substitute." This offence the Army compounder looks upon as smart. Out of a recipe containing five ingredients, he thinks nothing of substituting the whole lot, without the slightest regard for the disease, chemical reaction, or his conscience. When you know the conditions by which they become compounders you will not wonder much at this. They must be compounders before they are sergeants, therefore compounders are nearly as thick in Natal as locusts. The candidate visits a surgery in company with a compounder in the evening, twice weekly, for a few months before his examination. They juggle with some drugs and a poison-cupboard, and at the end of the period the candidate presents himself before a Board of perhaps a lieutenant, a captain, and a major, for examination. Usually he is successful, and then very frequently his "compounder" days are over for all time. He next turns his attention to being a sergeant and a cook or storekeeper. As far as I can see, much more attention is paid to the ability of the cook than the compounder. Some R.A.M.C. compounders asked me "not to expect much of them, as since they had passed until now they had never been in a surgery." They cannot prepare emuls. ol. morrhue c. hypophosph., consequently it is bought locally as a patent medicine. The same applies to a simple 1-in-20 proof-spirit tincture of *Monsonia ovata*, given in the *C. & D.*, page 491, by Civil Compounder MacCreath. This is bought under a fancy name by the military from a colonial chemist in enormous quantities at 2*l.* 10*s.* per gal. Is that not waste of public money? The plant grows round almost every hospital, and is a specific for South African dysentery.

I have often met these military examiners, and I am not aware that they possess any pharmaceutical training or knowledge. These facts at first staggered me, and as Mr. Rymer Young (Pharmaceutical Society Council-meeting, November 7, 1900) foretold, "they disclose a deplorable state of affairs"; but I think if they are carefully brought to the notice of our new Commander-in-Chief they will be remedied. I suggest that Army dispensers be reduced in quantity, and raised in quality; and that examinations be conducted by qualified men. Every first-class qualified dispenser should hold no lower rank and pay than that of a warrant-officer. For small stations a second-class dispenser should be a sergeant. The present military prospectus would do for the second-class dispenser, provided he knows it well. When the help of civilians is called for in time of need they should be treated as well as possible, and not the reverse.

The sending out to the seat of war of volunteer qualified chemists as private soldiers for special service, like many other matters in this campaign, does not reflect much credit on the War Office. These gentlemen were at the mercy of every illiterate lance-corporal or second-class staff-sergeant. During this war, where the military have been so dependent on civilians, I have heard no more urgent call than for good dispensers. Yet all the Hottentot transport-drivers have received twice as much pay. The coloured dispensers of the Indian Army at Ladysmith had a better rank than any imported chemist. It is a terrible state of matters to see a coloured person ranking before an educated European—in South Africa. Those chemists engaged in Natal were treated better. Their position was generally what they themselves took up, and as they were helping the Army out of a frightful muddle, they were allowed a good deal of licence at that time. Still, they also had hard knocks. A

hospital nurse in London, certificated or otherwise, usually earns about half the salary that a qualified chemist does. With this Army the positions are different. She draws less pay and more allowances. I know a chemist—who served the R.A.M.C. long and well when, metaphorically, it hardly knew whether it was standing on its head or its feet—who had to exist on a private's ration allowance—1*s.* 2½*d.* per diem—in expensive South Africa. Another poor M.P.S., who was the only dispenser at a large hospital with hundreds of beds, during nine and a half months, was cheated out of six weeks' quarters allowance by the mighty and glorious British Army. On moving the hospital to a new site they could not find him sleeping-quarters, so he slept in the village and claimed allowance. Afterwards several Red Books were produced, and it was pointed out to him that, by certain rules and Sub-section G of another by-law in the Queen's Regulations, he was "out of court." He produced his agreement—7*s.* per diem, with rations and quarters—and after nineteen letters had been written between one Department and another—A.S.C., A.P.C., R.A.M.C.—it was decided against the poor-paid dispenser. He had to pay the quarters out of his slender income.

I know that our compounder plan is a farce in comparison with the elaborate system of qualified pharmacists in the great French army. Even the Boer farmers were most particular in this respect. In October, 1899, they secured all the registered chemists possible in the Transvaal. They, unsuccessfully, offered me 2*l.* per day, with a two-horse Cape cart and servant, to follow the commandoes—100*l.* payable in advance. The stock of drugs and surgical requisites which I saw them storing in the Masonic Hall, Johannesburg, was greater than that possessed by her Majesty's forces in all Natal. I could tell you of a military hospital (situated one mile from six chemists' stores), with 372 beds, where for some time the whole surgery and appliances were contained in an ancient sea-chest, filled by Savory & Moore long, long ago, and there all during the war the dispensing-apparatus consisted of one knife, one pair scissors, 1 pill-mortar, one 3ij. glass measure, one 2*s.* pair hand-scales. Not wishing, however, to injure any particular individuals, I withheld a hundred facts from the Hospital Commission that would not look well in print. So did forty doctors. It is the whole medical system that I wish to see changed to an efficiency equal to that of the other Great Powers or better; and if these notes are discussed in the proper quarter I shall consider I have served my country, so that in the next great war we may be forearmed.

## A Compounder in Camp.

THE following notes have been contributed by a chemist compounder who was called up for service as a reservist in one of the home camps:—

It is a fact, perhaps not known to many, that notwithstanding the huge body of troops of all arms of the Service sent to South Africa during the past twelve months there has never been such a large number of soldiers under arms in this country as there is at present.

Being an old reservist of the Army Medical Staff Corps, I was called up and ordered to take over the duties of compounder in a large camp in the North of England at the beginning of the summer, where we had over 2,000 men of the Royal Reserve battalions. As the weather during June and July was very broken, and the camp accommodation limited, the life was far from being a bed of roses; consequently large numbers were on the sick-list with rheumatism, lumbago, and kindred ailments. Stimulating liniments with diaphoretics were chiefly prescribed for these disorders, and as the virtue of the former greatly depends on the application, it was amusing to watch the old soldiers trying to avoid the rubbing-process which the orderlies performed with much vigour.

Minor injuries, such as sprains and black eyes, were of frequent occurrence, and these generally found their way to hospital for treatment. It was very interesting to hear how they sometimes happened. A Cockney came one morning with a beautiful black eye which, he told the medical officer, had been the gift of a son of Erin. They had been doubling



round the drill-ground with their company, when the Londoner gave expression to the rather forcible remark, "D——n doubling!" which the Irishman wrongly construed as an insult to the capital of his country, and replied "D——n London!" at the same time hitting the Cockney in the eye, with the above result.

Elegant pharmacy was not the order of the day considering the conditions under which dispensing was performed, but sometimes it was rather rough on the patient who had 2 oz. of mist. sennæ co. for diarrhoea, which was intended for his chum suffering from constipation, and *vice versa*; but, nevertheless, the old soldier, as a rule, had great faith in anything got at the field hospital.

Recreation, in the form of cricket and football, was indulged in when the weather was propitious, and many of us were greatly benefited by the change from the close confinement of the towns to the pure air of the bills, even taking into consideration the wet weather and the hardships we had to put up with.

## "C. & D. Diary."

A FURTHER instalment of opinions on our 1901 DIARY is appended:—

"It beats a'."—G. R. HANKINSON (Uttongeter).

The book for the trade.—R. BLUETT (Watford).

Your annual subscription returned (with interest).—"ULEXINA" (Cambridge).

O *Daily Mail*! urge me no more,  
Your big-book boom, I trust, is o'er;

But here's a nice inquiry:  
What book the sooner would I buy  
Than volumes vast of your "Ency-  
Clopædia Britannic"? Why,

I rather have the DIARY—  
Our *sine quâ non* DIARY.

D. GORDON (Liverpool).

From this DIARY's "leaves,"  
Information we "squeeze";  
'Tis the "root" of the truth without "tincture,"  
For, as diaries go,  
We would have you to know  
That the C. & D. DIARY's a "mixture."

JAMES CHALMERS (Kelty, Fifeshire).

Had a pleasant surprise the other morning when the carter handed in the C. & D. DIARY. Spoiled business that forenoon, though. First lost quarter of an hour looking through it myself, next found assistant over head and ears in the article on "Microscopy," and finally had to take it from apprentice and lock it up. Please send to house address next time.—R. R. R.

'Tis a good one, indeed,  
And it meets chemists' need,  
If they choose its pages to follow;  
Other diaries may try  
With its virtues to vie,  
But it beats all the others quite hollow.—R. P.

Whenever in doubt, you have only to look  
In the C. & D. DIARY—excellent book.  
Information so varied, concise and so clear,  
Will help you in business the whole of the year.  
R. LUCAS (Bridgend).

A chemist and druggist is a man with a more varied and a larger number of wants than any other business-man, and unless he keeps himself up to date in these respects he may as well close his shop; but if he carefully reads and heeds the C. & D. DIARY for 1901, with its far-reaching information and comprehensive advertisements, he will find his business increased and his influence extended.—MURRAY T. FOSTER (Collumpton, Devon).

Our DIARY improves each year—'twill soon have reached perfection.

A little here of everything appears upon inspection:  
Formulae and legal hints, advertisements galore;  
And being, too, so well arranged, what can we ask for more?  
The work-day needs it satisfies,  
And leisure moments gratifies.

SIDNEY C. JONES (Canning Town).

Re CHEMISTS' AND DRUGGISTS' DIARY, 1901.—The bark, otherwise the cover, is strong and elegant. The woody part consisting of advertisements, with the medullary rays of various information running through it, encircles the pith, and is most useful and attractive.—W. R. HEWLINS.

## Marriages.

COUPER—JOHNSTONE.—At Cromarty, N.B., on December 26, by the Rev. A. J. Macnicol, B.D., James Methuen Couper, merchant, Cromarty, to Isabella, eldest daughter of Mr. Walter Johnstone, chemist and druggist, Provost of Cromarty.

SWINTON—JENNINGS.—At St. Thomas's Church, Camden Town, on December 26, Ralph S. Swinton, analytical chemist, to Elizabeth Alice, eldest daughter of Mr. Joseph Jennings, Camden Town, N.W.

## Deaths.

CUNDALL.—Suddenly on New Year's Eve, at Morley, Leeds, Mr. Edward Cundall, chemist and druggist. Aged 64.

HOLWELL.—On December 18, at Wymeswold, near Loughborough, Mr. Alfred Holwell, chemist and druggist. Aged 46.

SIM.—At Kobe, Japan, on November 28, Mr. A. C. Sim. Aged 60. Mr. Sim served his apprenticeship to the drug-trade with Mr. Reid, chemist, Union Street, Aberdeen, and after being some time in London, went out to Shanghai while quite a young man. He was afterwards resident in most of the important seaports of China and Japan, and finally settled down in Kobe.

WARREN.—At Detroit, U.S.A., on December 14, Mary Buhl Warren, wife of Mr. William M. Warren, general manager for Parke, Davis & Co., Detroit and London.

WILLIS.—On January 1, 1901, at his residence, Swan-harbor, co. Cavan, Mr. William Willis, of Messrs. P. A. Leslie & Co., Dublin. The deceased gentleman, who had reached an advanced age, travelled for over 50 years for Messrs. Leslie & Co., and was well known and much esteemed by the older generation of pharmacists and apothecaries in Ireland. He was an intimate friend of the late Sir George Owens and Sir Dominic Corrigan, as well as of several other famous apothecaries and chemists. His uncle, the late Mr. Peter Willis, also travelled for Messrs. Leslie & Co., and on his decease in the late thirties, Mr. Wm. Willis and the late Charles Leslie divided the country between them. The last journey Mr. Willis took was to the North of Ireland in August, 1893, after which he took up office-work and internal management of the Bride Street firm. Last July he retired to his country residence. The immediate cause of death was pneumonia.

## Calcium Iodate.

DR. WILLIAM MACKIE gives in the *Lancet* his experience of calcium iodate as an antiseptic. The process by which the salt is prepared is as follows:—

Prepare an aqueous solution of iodine in potassium iodide. Dilute the same till it just transmits light through a depth of 3 inches. Stir up some bleaching-powder with water and filter into iodine solution, with occasional stirring. After a time a crystalline precipitate makes its appearance. If it is not perfectly white, but some shade of brown or slate-grey, add more iodide of potassium and stir. Run in the bleaching-solution to complete decolorisation of the iodine solution. Before collecting the precipitate add a small quantity of very dilute hydrochloric acid to dissolve any carbonate of lime that may have formed during the process. Collect on filter, wash once or twice with cold water, and dry on blotting-paper or in an oven at a temperature not much exceeding 100° C. The product is  $\text{CaIO}_3 \cdot 2 + 6 \text{H}_2\text{O}$ . The particular point to be attended to is to keep the iodide of potassium in excess during the precipitation.

Calcium iodate is without taste or smell and soluble about 1 in 380 of water (at 11.5° C). The salt has been used with good results in all cases where iodoform is commonly used, and can be used either in solution or powder. An antiseptic dentifrice can be made by mixing with chalk. The internal dose as a gastro-intestinal antiseptic is placed at 15 gr. as a maximum, but 3 or 4 gr. is a fair average dose for an adult. The salt has been known as "calcinol" in Elgin, which dispensers should note, as it may be ordered in prescriptions under that name.



## Trade Notes.

**TABLOID CALOMEL.**—Messrs. Burroughs, Wellcome & Co., Snow Hill Buildings, E.C., have filled a hiatus in their series of "tabloid" calomel by issuing one of 3-gr. strength. The other strengths of "tabloid" calomel are gr.  $\frac{10}{16}$  gr.  $\frac{1}{2}$ , gr.  $\frac{1}{4}$ , gr. 1, gr. 2, and gr. 5.

MR. G. S. V. WILLS, the Principal of the Westminster College of Chemistry and Pharmacy, sends us a proof of a photograph recently taken of the College students, which we fancy beats the record for the number of lady students included in it. At present there are a dozen of them studying in the College, and nine of these are represented in the photograph supporting the principal.

**MESSRS. CUNSON, GERRARD & CO.**, manufacturers of surgical dressings, &c., commenced the new century by opening new offices, showrooms, and warehouses in Corporation Street, Birmingham. The firm have acquired a lease of the prominent block known as "Crown Building," facing the general hospital, which has a handsome elevation, a clock tower, and has many fine rooms. A new feature is the surgical-instrument department, which has been inaugurated under a competent man.

THE "HAY WAIN" is the subject of the sixth Vibrona picture. This is one of Constable's finest efforts in depicting English rural life and scenery. We have had the opportunity of comparing the picture with the original in the National Gallery, and are struck by the remarkable fidelity with which the Vibrona print reproduces the tone and atmosphere of the original. Messrs. Fletcher, Fletcher & Co., Holloway, N., who publish the picture at 2s. 6d., post free, promised to issue six of the great national pictures. The "Hay Wain" is the sixth, but we trust the reception given to the series has been such as to justify them going on.

**IRONOL.**—Under the title "Liqueur Ironol," Mr. Mars Hoff, 29 New Bridge Street, E.C., is introducing to the English market an elixir the active ingredient of which is iron, combined with aromatic and bitter tonics. Pharmaceutically it is an excellent preparation, and the iron appears to be present in combination with an organic body, so that there is but slight styptic taste; and Professor Honigsmann, of Wiesbaden, has found that 80 per cent. of the iron present is assimilated after administration. We do not find the percentage of iron present to be very high, but the absorption is an important factor, and the pleasing nature of the preparation will commend it for use by children and ladies.

**BABBS.**—This is Daisy's latest. It is the name of a teething-powder put up in triangular form. There is nothing else in the market packed in this style, and, as it is composed of a pure drug, it is not liable to stamp-duty. The directions are quaint, namely:—" 'Babbs,' for easy teething. Absolutely safe. Doses: For 6 months old, half a Babbs; 1 year, one Babbs; 18 months, one and a half Babbs; 2 years and upwards, two Babbs." We understand that Babbs has not been put on the market as an exhilarate of "Daisy," for the sales of that article are still progressing; but the company have recently purchased the Mammoth Works, Holbeck, Leeds, which were formerly used as flax-mills, and they have room for making other things than Daisy—hence Babbs.

**ABBEY'S EFFERVESCENT SALT.**—Fully a year ago a New York correspondent wrote to the *C. & D.* in regard to the wonderful success in the United States of Abbey's Effervescent Salt. After thoroughly establishing the salt in the affections of the American public, the proprietors, who are the Abbey Effervescent Salt Company (Limited), Queen Victoria Street, E.C., have brought it over to this country, and have, we understand, made arrangements to bring it prominently under public notice. If they do it in anything like the style that they did in the United States the salt will be one of the best-advertised articles in this country before the end of 1901. It differs in appearance and get-up from salines now familiar to the British public. In the first place it is a granular preparation, and appears to contain a con-

stituent which has a decided cholagogic effect. In the second place it is put up in square bottles with glass cork-ringed stopper, and the carton is tastefully engraved with a portrait of Shakespeare, forming the trade-mark, portraits of Mr. Sims Reeves, Madame Marie Rozé, Christine Nilsson, and Sir Henry Irving being prominent on the sides. It retails at half-a-crown.

**EDGAR'S LOTION.**—We notice that Edgar's Croup Lotion (Limited), Dartford, begin the century with a new trade-mark consisting of a basin with a throat-bandage, showing how the lotion is poured on the bandage before it is applied to the throat. It would be as well for our subscribers to make themselves familiar with the change in the carton which the trade-mark has involved, by reference to the advertisement in this issue. We may also take the opportunity of saying that the company offer new showcards, dummies, and counter-bills to retailers. They sent out no fewer than 900,000 last month. They supply them with either one page blank, or on this blank page they print free any announcement which retailers may wish. Further particulars in regard to the matter may be obtained on application to the company at the above address.

**ORION WINES.**—A bonded dépôt has been established at 35 Walbrook, E.C., for South Australian wines which are now being placed in this country as the "Orion" brands, Messrs. Blandy Brothers & Co., 16 Mark Lane, E.C., being agents for them. We have recently had the opportunity of testing these wines, and have been struck with their distinctive qualities. As a rule, people are sceptical in regard to the quality of colonial wines, but there is no question that those imported as the "Orion" brand are in many respects superior to continental wines sold at the same prices. We would specially commend the Burgundies as being well suited for invalids. One that is sold under the name of "Ruby" is rich, dry, and has an excellent bouquet, especially when the temperature is slightly raised. Of the white wines, the Chasseles and Muscat are very good. The former is a light hock, somewhat resembling Niersteiner in flavour; while Muscat, either as a luncheon-wine or a full-bodied white wine for dinner, is to be commended. It is rather to the sweet side, but is not unpleasantly sweet, and the bouquet is exquisite. "Orion" brandy is also supplied by Messrs. Blandy Brothers & Co., which is distilled from grape-wines in South Australia. It is not a doctored article, and is so well matured and so rich in flavour as to make it especially suitable for medicinal purposes. The wines are supplied under the South Australian Government's certificate.

## Mr. Labouchere on Examiners.

THE longer I live the more convinced I become that our educational system will never be satisfactory until we undertake in a scientific manner the education and examination of examiners. A school for examiners ought to be established, and no one should be allowed to conduct an examination or set a paper who has not graduated with honours at this establishment. The idea that because a man has been through the mill himself, or has written books, or given other proofs of learning, he is therefore competent to examine his juniors is quite a fallacy, as may be seen from half the examination-papers with which the rising generation is afflicted. Examiners may be divided into three classes. There are, first, those whose object in setting a paper is to display their own knowledge or air their pet theories. As it is easy for coaches and candidates to find out what the examiner prides himself on knowing or what are his pet theories, this class of examiner only tests the skill of the coach and the "slimness" of the pupil. Secondly, there are the examiners whose primary idea is to bowl out the candidates. These are chiefly occupied in discovering what the candidate does not know. Properly speaking, they are not examiners but cross-examiners. Lastly, there are the examiners who seek to ascertain what the candidate really does know. These are the examiners who know their business and do it. Roughly speaking, examiners are about equally distributed between these three classes. It follows that only about one-third of them are really fit for their positions.—*Truth.*



## Scientific Progress.

**Artificial Perfumes.**—In the last issue of *Nature* (December 29, 1900) is printed a paper by "W. J. P." on this subject. It is not suited to abstracting, and reference should be made to it by those who wish fairly up-to-date information on the synthesis of perfumes.

**Estimation of Morphine.**—Reichard (*Chem. Zeit.*, 1900, 1,061) gives the details of a process for the estimation of morphine, depending on the quantitative reduction of silver nitrate. He gives a number of analyses in which the process appears to have worked very accurately, but as these were all done on pure salts of morphia they are no indication of the value of the process analytically. There are so many bodies in organic mixtures which reduce silver nitrate that the probability of the process being of any practical use is very remote.

**Glycero-phosphate of Quinine.**—M. Prunier, before the Paris Congress of Pharmacy, gave the following as the best way of preparing glycero phosphate of quinine. A saturated solution of glycero-phosphate of lime is added little by little to a solution of oxalic acid (1 in 20), taking care that a slight excess of glycero-phosphate is left. After some hours filter out the oxalic acid. To the clear solution add a slight excess of hydrate of quinine suspended in water. Boil the liquid and filter whilst hot. On cooling crystals of basic glycero-phosphate of quinine are deposited.

**Oxidation of Aloin.**—An interesting study of the oxidation products of barbaloin is published in the *Berichte* (1900, 3,213) by Seel. He states that when potassium persulphate is used as the oxidising agent the products vary according to the quantity used. The most characteristic product is a red compound, probably identical with the "aloin-red" of Schaer. A better-defined compound is given if Caro's reagent be employed. A brownish-red powder is obtained, which yields, by extraction with chloroform, a red crystalline body, which, on analysis, proved to be tetroxymethylanthraquinone.

**Chemistry of Mandragora-root.**—According to Wentzel, the alkaloid which has several times been examined and reported on under the name of mandragorine is nothing more than a mixture of several bases in which hyoscyamine preponderates. The other constituent appears, with a great degree of probability, to be hyosciue. The presence of atropine could not be confirmed, as by a fractional precipitation of the crude bases no characteristic gold chloride of this base could be detected. When it has been found it appears to owe its presence to the action of alkalies used in the process upon the hyoscyamine. Besides the two alkaloids above mentioned, there are present the following bodies:—Methoxy-methyl-piperidine, a base soluble in water; an alcohol of the formula  $C_{22}H_{40}O_2$ ; phytosterin; chrysotropic acid; and glucose. (*Apoth. Zeit.*, 1900, 794).

**Sandalwood Oil.**—Soden and Rojahn contribute a paper on the constituents of West Indian sandalwood oil to the current issue of the *Pharmaceutische Zeitung*, in which several new facts are announced. They have examined the alcoholic constituent which they had named amyrol, and show that it is a mixture of two bodies on a higher boiling alcohol with the formula of a sesquiterpene alcohol,  $C_{15}H_{26}O$ , strongly dextrorotatory,  $[\alpha]_D^{20} = +36^\circ$ , and boiling at  $229^\circ C$ . The lower boiling fraction, which is present in far the greater quantity, appears to have the formula  $C_{15}H_{24}O$ , and is, therefore, not a sesquiterpene alcohol. The dextrorotatory alcohol easily gives up water under the influence of mineral acids, and thus yields a sesquiterpene which is identical with levorotatory cadinene (dextrorotatory cadinene has already been found in this oil by Deussen). From the non-alcoholic portion of the oil the authors have separated a crystalline body, which appears to belong to the series of lactones. It forms colourless, odourless, and tasteless crystals, melting at  $117^\circ C$ , and dissolving in alcohol with an intense blue fluorescence. It has the formula  $C_{14}H_{12}O_3$ . The authors have termed it amyrolin. It forms a dibromide,  $C_{14}H_{10}O_3Br_2$ , in the form of an amorphous powder, melting at  $157^\circ-159^\circ$ . The yield from 10 kilos. of oil was only 10 grammes, and the investigation of its properties is not yet complete.

**HEIGHT LIMITED.**—A small boy, who had been instructed in the theory of the barometer, and in the results which follow from "nature's abhorrence of a vacuum," was asked in an examination-paper to explain why, in baking, the juice in a fruit-tart always runs up into the inverted cup which cooks generally place in the centre of the pie-dish. After learnedly explaining the whole matter, this youthful scientist cautiously added the following proviso:—"N.B.—The cup must not be more than 32 feet high."—*Liverpool Post*.

## Pharmaceutical Fauna.



### The Water Dragon.

And as the king lay on his couch at midday he dreamed a marvellous dream, in the which he saw a Great Dragon fly from Kentish Town towards the west, and it descended on Cader Idris. Its head was like unto a London County Councillor's, with locks like the raven's and a beard silver sprinkled. Its body shone like a syphon top, and its tail was tipped with fine gold. And in his vision it seemed to the king that the dragon was the guardian of the water-fountain on the hill-top, and it sought to carry the stream of pure water from the west to the Great City, wherewith the people thereof might wash them and be clean. But the water-rats in the Great City attacked the dragon, and they fought with great ardour until—the king woke.

## New Books.

Bailey, L. H. *Botany: an Elementary Text-Book for Schools*. Cr. 8vo. 6s. (Macmillan.)

Blount, B., and Bloxam, A. G. *Chemistry for Engineers and Manufacturers*. Vol. i.: Chemistry of Engineering, Building, and Metallurgy. 8 $\frac{3}{4}$  × 5 $\frac{3}{4}$ . Pp. 254. 10s. 6d. (Griffin.)

Brannt, W. T. *Practical Treatise on Manufacture of Vinegar*. 2nd ed. 8vo. 25s. net. (Low.)

*British Journal Photographic Almanac and Photographer's Daily Companion*, 1901. Cr. 8vo. 1s. 6d. net; swd. 1s. net. (Office.)

Christy, C. *Mosquitos and Malaria: Summary of Knowledge on Subject up to date: with Account of Natural History of some Mosquitos*. 6 plates. 8 $\frac{3}{4}$  × 5 $\frac{3}{4}$ . Pp. 92. 6s. net. (Low.)

Jackson, E. *Manual of Diagnosis and Treatment of Diseases of Eye*. 178 illus., 2 clrd. plates. 8 $\frac{3}{4}$  × 5 $\frac{3}{4}$ . Pp. 604. 10s. 6d. net. (Saunders.)

Lumner, O. *Contributions to Photographic Optics*. Translated and augmented by Silvanus P. Thompson. 9 × 5 $\frac{1}{2}$ . Pp. 135. (Macmillan & Co.)

Moses, A. J., and Parsons, C. L. *Elements of Mineralogy, Crystallography, and Blowpipe Analysis from a Practical Standpoint*. Illus. New ed. 8vo. (New York) London. 10s. 6d.

Ramsay, W. *Modern Chemistry: Theoretical and Systematic*. 6 × 3 $\frac{3}{4}$ . Pp. 332. 1s. net each. (Dent.)

Southworth, F. W. *True Metaphysical Science and its Practical Application through the Law of Suggestion*. 8vo. (Tacoma) London. 15s.

Stables, W. G. *Fresh-Air Treatment of Consumption and Nervous Ailments*. 7 $\frac{1}{4}$  × 5. Pp. 52, swd. 1s. (Jarrold.)

Townshend, J. S. *Diffusions of Ions produced in Air by Action of Radio-active Substance, Ultra-Violet Light, and Point Discharges*. Phil. Trans., A. Vol. 159. Pp. 259-278. 1s. (Dulau.)

Wishart, R. S. *Self-Educator in Botany*. Ed. by John Adams. 7 $\frac{1}{2}$  × 4 $\frac{3}{4}$ . Pp. 242. 2s. 6d. (Hodder & Stoughton.)



## Observations and Reflections.

By XRAYSER.

REVIEWS OF THE CENTURY are painfully trite just now, and a strong-minded commentator would rigorously avoid the subject. But new centuries are fascinating, and the point of time between the old and the new one compels reflection. I have been looking through some of the periodical literature of 1800 and 1801 to see what the writers of those dates had to say of the century they were bidding good-bye to. This is a specimen, taken from an article in the *European Magazine* of the end of 1800:—

On a general recollection or review of the state of society or human nature in the eighteenth century, the ideas that occur the oftenest, and remain uppermost on the mind, are the three following:—The intercourse of men were more extensive than at any former period with which we are acquainted; the progression of knowledge was more rapid; and the discoveries of philosophy were applied more than they ever had been before to practical purposes.

The very three things which the papers have been telling us were the characteristics of the nineteenth century.

A MORE CURIOUS PARAGRAPH may be quoted from the *Gentleman's Magazine*. A correspondent ("Podalerius, Junior") writing in that publication of August, 1801, on the "Progress of Medical Science," remarks that, "notwithstanding the rational improvements made in the arts of physick and surgery within the last century there is room for infinitely further advances. Future ages will make discoveries of which we have no conception. In course of time men will be better acquainted with the latent causes of diseases and the *rationale* or the *modus operandi* of medicines." He instances "Peruvian-bark as removing the paroxysms of an intermitting fever, but upon what principle the bark operates upon the proximate cause of the disorder" he avows his ignorance. Then he goes on to suggest that the full extent of those disorders which derive their origin from animalculæ will admit of much farther investigation. He knows something of the icenia, the sirones, the ascarides, and the pediculi, and he is strongly inclined to adopt the theory that itch is caused by animalculæ. But he is sure that the disorders occasioned by invisible animalculæ are far more numerous and destructive than is imagined, and he asserts his belief that in all cases in which sulphur, calomel, corrosive sublimate, precipitate, and similar medicines have proved efficacious the disorder is animalcular.

CENTURIES SUCCEED ONE ANOTHER, and each thinks itself vastly superior to all its predecessors. Each one has some great accomplishment or some wonderful event to distinguish it, but the essentials of human existence are familiar through them all. Among these essentials is the druggist. Since the first stomach-ache the druggist's art has been necessary to men, savage and civilised. According to Æschylus the art of pharmacy was taught to the human race by Prometheus. That far-distant benefactor, boasting of what he had done for humanity, says "the first and greatest" boon he bestowed was "when fell disease preyed on the human frame," and when "no healing drug, nor cool refreshing draught, nor pain assuaging unguent," was to be got, it was he who

Taught them  
To mix the balmy medicine, of power  
To chase each pale disease, and soften pain.

In other words, he created pharmacy.

THESE MIXERS OF THE BALMY MEDICINES of course administered them too; they were, in fact, prescribing

druggists. Out of their ranks sprang the founders of medical science, Hippocrates, Galen, Avicenna, and other ancient healers, all of whom prepared their own medicines. But those who attained popular favour sought, then as now, to get above the shop, and as soon as they had made that step they clamoured for the suppression of the prescribing habits of their late associates. Thus it came to pass that in all continental countries the functions of prescribing and compounding are legally separated. But, penalties notwithstanding, this divorce is only partially effective, and everywhere there is a disposition to revert to the ancient, the natural, the savage, and, it must be added, the British type. The prescribing druggist is, in fact, almost a law of nature, and he cannot be suppressed. How the centuries must laugh when they compare notes among themselves, and watch the puny little coroners of our day vowing that they will put down this prescribing druggist who traces his ancestry back to Prometheus.

THE MENTION OF CORONERS compels an allusion to the singular exhibition which the cocksure gentleman filling that office at Manchester made at the inquest reported last week, when he attempted so oracularly to expound the Pharmacy Act. But the irritating feature of that report was that the chemist into whose hands the Coroner was delivering himself knew very little more about the provisions of the Act than did his accuser. An accurate acquaintance with the statute would be worth acquiring by chemists if only for the purpose of pulverising a coroner now and then.

RETURNING TO THE CENTURIES, I am afraid the position of British pharmacy is less hopeful just now than it was in 1801. Then, as we know now, the chemists' and druggists' star was in the ascendant, and I think they knew it too. They went on confident and progressing until 1838, when Parliament recognised them and set them apart from the common run of mankind. Since then it seems as if some malevolent planet had come into opposition and had partially paralysed them. For years they scarcely utilised the Act which had been passed for them, and it was only outside pressure which made them appreciate it. Meanwhile half its value had been taken away for the benefit of aggressive foes whom they had no heart to resist. Now, on the threshold of a new era, the trade is asked to unite in a great effort to re-assert the principles of the Act of 1838. The response that is coming in is on the whole discouraging. "We would be glad to see Clause 4 enacted, but we do not like to ask for it," is the tone of many of the speeches. Even the stronger ones say, "Let us ask for it, but take less if we are refused." Victory was never yet won with such half-hearted battle-cries. Parliament, like Luck, "hates the slow and loves the bold." It only yields to those who know what they want and insist on having it.

XRAYSER IV., who will probably be contributing to the daily *C. & D.* in 2001, will, I hope, unearth this prophecy of his journalistic great-grandfather. Unless the pharmacists of this day can be induced to fight, and to fight hard now for their heritage, for the principle of the qualification of the owner, which is the principle embodied in the qualified-directorate demand, that heritage will be taken from them, and pharmacy in this country will become a mere grocers' and drapers' side-line, a department run by capitalists, in which the unqualified man controls the one who has proved his competence. This is the state of things we are drifting towards, and an eminent Liverpool pharmacist actually proposes to legalise it. It is to be hoped that those who desire a better future for British pharmacy will perceive this inevitable tendency as clearly as Mr. Abraham does, but will be influenced to take action in an exactly contrary direction.



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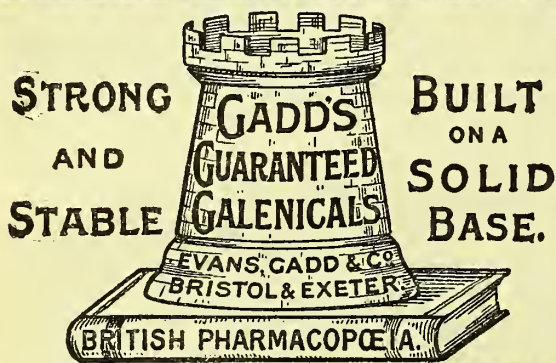
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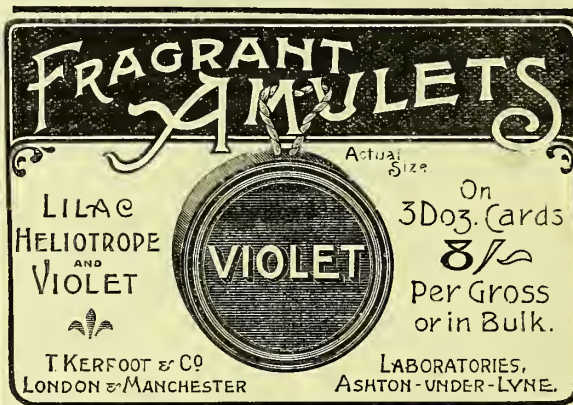
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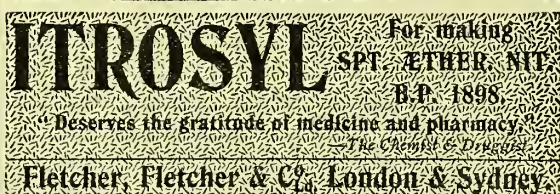
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## Editorial Comments.

### Australia's Future.

THE twentieth century opened to a decidedly pessimistic tone, so far as the inhabitants of the United Kingdom are concerned. We are decadent, we are conservative, we are slow, say many of those whose function it is to crystallise British opinion; and we have not been allowed to forget that in turn half-a-dozen nations have been mistress of the world and its commerce, so that our time of lapsing into second place or lower is sure to come, and probably in this century. Opinions of what is to happen and what is the best thing to do in the circumstances are the order of the day. While this has been going on, our fellow-countrymen in Sydney, New South Wales, have been putting the seal to a document which is emblematic of the extent of our interests, the grit of our people, and the possibilities of the



century's business. The colonies of the Australian Continent and of Tasmania were on that day united into a Commonwealth. It is a third of a century since the Dominion of Canada, then comprising four provinces, were united by a similar bond, and since then other provinces have entered the Confederation, but Newfoundland still stands outside, just as New Zealand is doing from the Australian Commonwealth. The success which has followed the Canadian Confederation will surely attend the Commonwealth of Australia. The systems of government will be practically identical—one Ministry for the whole Commonwealth, with representative Houses to formulate laws common to all the colonies. In regard to trade, the most important change will be the obliteration of internal tariffs, goods may pass from Port Darwin to Melbourne, and from Brisbane to Perth without fiscal check or hindrance. We at home can imagine what a gain that will be to the trade of the country if we suppose that fiscal barriers existed in every county between London and Liverpool, with all the attendant formalities that have now to be gone through at every port in the kingdom. Business would be intolerable under such conditions, and it has been in Australia; efforts were warped, enterprise localised, and intercolonial relations discouraged. It can scarcely be doubted that intercolonial free trade will help to disestablish the protective system which at present obtains in all the colonies (for New South Wales will be brought into the protective circle), but the indications at present point to little relaxation of the duties on imported goods, and, rather, that local industries may be protected more than they are now. In the old country we have realised by happy experience that the protection of an industry means the enrichment of internal manufacturers at our expense, and that it is cheaper for the taxpayer to be called upon by the Government to pay a shilling in direct taxation, than for the Government to gather the shillings from a few importers, who with many middlemen and retailers must add a little to the shillings before they get them back again from consumers or taxpayers. Australians will come to the cheaper way in time, and even now they will not overlook the fact that the wealth of the colonies is in Nature's produce, and that the best customer for such exports is the mother country, therefore to bar the entry of British manufactures by protective duties will be in the nature of insulting a customer. At present the Commonwealth does not appear to forecast direct influence upon colonial pharmacy, and the experience of the Canadian provinces is not encouraging in that regard. Canada has as many pharmacy laws as there are provinces, and as many Pharmacy boards to regulate the internal affairs. A recent attempt at reciprocity has failed. Still, in Australia matters are more hopeful. Federation has stimulated intercolonial pharmaceutical reciprocity in a marked degree, and the leaders in the movement have only to keep pegging away in order to get their aspirations realised.

### Business Ethics.

BROADLY speaking, the relations which exist between the present-day pharmacist and his business competitor are far from ideal. Instead of that friendliness and forbearance which each man owes to his neighbour, a more or less veiled feud appears to exist in the majority of cases between chemists in the same neighbourhood, and many things are done under the name of "business" which are questionable, not only to honour, but to honesty. The cut-throat competition which exists in the commerce of our times has doubtless much to do with this condition of affairs, but if

business men would but look at it rightly, they would find that "it pays" to cultivate courtesy and kindness towards their competitors. The "mailed fist" method of doing business may be successful for the few, but it does not tend either to the ultimate satisfaction of the owner of the fist or to the general welfare of the community. These thoughts happen to be in sympathy with the season, but they are really prompted by Mr. J. W. Gayle, who has been addressing the Kentucky Pharmaceutical Association on the subject. He points out that, under proper conditions, the pharmacist's competitor is generally his best friend, and advocates co-operation in buying and selling between rivals in the same district. By co-operative buying extra discounts may be obtained on many staple lines of goods, and a larger stock can be kept. When received the entire stock can be divided as agreed upon before purchasing, and should anyone's stock become exhausted before the others, he should be supplied by the others at the original purchase-price, until all are again ready for a new order. The benefits of co-operation in selling can be obtained in the disposal of surplus articles, which accumulate notwithstanding the greatest care. Concessions in price—a discount of 10 per cent. being suggested as an equitable basis—should be made when supplying others with deficiencies, and thus the greatest profit accrues to the most diligent stockkeeper. A private price-mark should be placed on all prescriptions, thus maintaining prices and preventing the hawking about of prescriptions to be dispensed by the lowest bidder. Local organisation and social intercourse are both strongly recommended, and the maintenance of prices is cited as one of the most important of the positive features of the relations, as they ought to exist, between competitors. On this point Mr. Gayle says:—

Every article of well-known retail value should bring its full price. A well-defined standard of charges should be adopted upon prescriptions, and staple articles of a similar value should, as nearly as possible, bear a uniform profit. These will be firmly adhered to wherever the ideal relations exist. The necessity of posting forfeitures or preparing signed articles of agreement to maintain prices never exists under proper conditions. The word of a competitor should be taken at par. Where this cannot be done, signed agreements will be of temporary value only, to be evaded and violated by a course of indirection and deceit, the results of which are in the greatest degree demoralising. The importance of steadfast personal confidence among competitors can neither be over-estimated nor too strongly insisted upon.

Turning to the negative side of the question Mr. Gayle enumerates the things which should be avoided, and urges, primarily, that goods should never be borrowed from a competitor. This practice, besides being unbusinesslike, reacts upon the borrower by encouraging carelessness in stockkeeping, and leads to confusion and misunderstandings. Furthermore, injustice is done to the lender, because the one who lends most where such a system prevails is always the best stockkeeper. To ask a competitor for the copy of a prescription is a gross breach of etiquette, and should a customer send for a mixture which has been dispensed by a neighbour, the latter should be asked to prepare it again. Where the proper relations exist a competitor may gracefully offer a copy, but the slightest indication of a desire to obtain it should be scrupulously avoided. To attempt, directly or indirectly, to undersell to a competitor's regular customers is bad business policy, and, adds Mr. Gayle, is of questionable honesty. An imitation of the peculiar business methods of a competitor, as regards window-displays and so forth, should be avoided. Such a method is a most effective compliment and advertisement to the rival, and it shows want of business capacity and a lamentable lack of originality. No attempt should be made to stock goods the sale of which a competitor legitimately controls in the district; and a deaf ear should be turned to the tales of exorbitant prices which a certain class of persons are eager to report as



charged in other pharmacies, while a similar scepticism should obtain when stories of low prices and unusual discounts are retailed. Mr. Gayle concludes by condemning the practice of giving physicians a percentage on their prescriptions, because it is "unbusinesslike and unprofessional." There is much in these American aphorisms applicable to British conditions, but just exactly where competition should begin and end is the point upon which ethical hairs are split.

## A Warning.

A PROVINCIAL firm send us a letter which they received last week, and which we reproduce in reduced facsimile:—

From MRS. S. A. HELLYER, LYDD, KENT.

*29 Dec 1899*  
*You may observe from whole sale merchants*

Our correspondent did not do business with this lady, and we bring the matter under the notice of our readers generally so that they may, in the event of receiving similar missives, assure themselves in regard to her connection with Henry Heath, *alias* Henry Heath Hellier, *alias* William Hellier, of Heath House, Lydd, Kent, formerly in business at Hawkhurst. This gentleman was sentenced on April 10, 1895, to twelve months' hard labour for obtaining credit to the extent of 20*l.* and upwards from the Sanitas Company and other firms without disclosing the fact that he was an undischarged bankrupt. He was arrested by the Lydd police on March 12, 1897, again charged with unlawfully obtaining credit whilst an undischarged bankrupt, and remanded. On March 20, 1897, he was brought up and charged as follows:—(1) Obtaining credit to the amount of 20*l.* 17*s.* 5*d.* from Mr. T. H. Clayton, of the Bryn Malby Collieries, near Wrexham; (2) for 28*l.* 12*s.* 3*d.* from Keevil & Best, provision merchants, Cowcross Street, London; (3) for 21*l.* 0*s.* 2*d.* from Messrs. T. Avery & Co., scale manufacturers, Birmingham and London; (4) for 33*l.* 1*s.* from Messrs. Williams & Norgate, booksellers, 14 Henrietta Street, London; (5) for 31*l.* 18*s.* 8*d.* from Messrs. Jones & Co., bamboo furniture-dealers, 16 Queen's Road, Bayswater, W.; (6) for 25*l.* 0*s.* 9*d.* from the Richmond Gas Stove Company (Limited), Warrington; and (7) for 20*l.* 2*s.* 8*d.* from Messrs. Willer & Riley, provision merchants, Southampton—in all cases without informing the firms that he was an undischarged bankrupt. It was stated that Heath also traded under his wife's name, and they had two houses full of goods, amongst which was a large quantity of patent medicines and drugs. (These goods were subsequently sold for the benefit of the creditors under Heath's failure at Hawkhurst in 1893, and a first and final dividend of 1*s.* 9½*d.* in the pound was announced by Mr. Howard W. Cox, Official Receiver of the Hastings Bankruptcy Court, in December, 1897.) Heath was sent for trial to the Kent Sessions, and was sentenced on April 6, 1897, to two years' hard labour. We announced a short time ago that he was at his old tricks again. This is the first occasion since his release that we have seen the heading reproduced above.

## Essential Oils.

IT MAY be useful as an appendix to the review of chemical progress in 1900 which we printed last week, to recall some of the work that has been done in essential oils, as some researches have been exceedingly fruitful. Sandalwood oil was popular with investigators, having attracted the energy of English, German and French chemists. Soden, Müller,

Guerbet Dulière, Schimmel, Parry, and Chapman have all published the results of their work, and from comparative obscurity this oil is now well on the road to being completely understood. The principal result is the definite proof that the so-called santalol is in reality a mixture of alcohols, and the properties of at least two of them are fairly understood. A number of new compounds [not of an alcoholic nature have been discovered, and several crystalline compounds have been prepared. These include a phenyl-urethane (Parry), santalyl-phthalate of silver (Schimmel), and santalenic acid (Chapman). The work of Charabot, although only of a tentative nature so far, is important. He has commenced the examination of the oils of plants at different times of their growth, with a view to tracing the development of the constituents. So far he has paid special attention to lavender, peppermint, thyme, and bergamot, and his results tend to show that the acid formed during growth has a double and simultaneous effect. A portion of it acts on the already-formed alcohols and converts these into esters, and so increases the fragrance; whilst another portion acts as a dehydrating agent on the alcohols, converting them into terpenes. Further researches in this direction are needed, and should have a marked effect on the scientific aspect of the distillation-industry. Jeancard and Satie also have experimented on oils of lavender distilled from plants grown at different altitudes (1,000 to 1,800 metres), and conclude that altitude has no influence upon the ester-content of lavender oil. Umney has shown that at high altitudes spike lavender does not grow to any extent, whereas *Lavandulacera* does, hence the importance of the difference between the ester-content of an oil obtained in a low altitude and one at a high. Spike oil contains a lower percentage of esters than true lavender oil, and this distinction is valuable. Jeancard and Satie's work tends to discredit the ester-determination as a means of valuing the oil, and they say that the esters are partially saponified in the distillation. These observations need support before we give up the generally accepted belief that the best chemical method for judging the fineness of lavender oils is by the ester-percentage, and that ester-percentage and other physical characters afford the very best means of determining the absence of spike-lavender oil.

Keerschbaum has isolated a new and well-defined ketone from the true oil of verbena, of which the principal constituent has long been regarded as citral. This body he has named verbenone. It only occurs to the extent of 1 per cent., but is sufficient to modify the odour of the oil to a considerable extent. Orange oil has also attracted much attention, and Parry, whose results were published in this journal, isolated from it several new bodies. These were methyl anthranilate, linalol, and butyric acid. Schimmel & Co. have confirmed most of these results, and have also isolated decylic aldehyde from the oil. Methyl anthranilate has also been detected in the oils of mandarin orange, and lime-flowers, these being the only oils in which it has been found, except neroli. The most important work in this domain, however, is the discovery of several new bodies in otto of rose, which has led to the production of a synthetic otto. Schimmel & Co. have proved the existence of nonyl aldehyde, citrol, linalol, and citronellol in the oil. Erdmann has also shown that phenyl-ethyl alcohol exists in small quantity. Much other good work has been done in this department, but space forbids us to go further.

MESSRS. AYRTON & SAUNDERS, of Liverpool, now inform us, in regard to the three prizes of shopfittings which they are to give this year to their customers, that all orders will be counted, whether they come to them direct by post or are given through their travellers.



## NEW CENTURY APHORISMS.

We are able to state that the real reason why Mr. Reynolds's bird was not in the *C. & D.* last week was its absence on the common quest of the day, gathering from the one-and-twenty in high places what they have to communicate to the craft as watchwords for the twentieth century. It has whispered to us the following messages of hope from distinguished personages:—

C. B. A.—I am pleased to inform you that you have satisfied the examiners, and would advise you to study for the Major. [*Aside.* It's men, not guineas, we want now.]

S. R. A.—Silence is silver and speech is golden, but lie low and say nothing—well.

M. C.—Hearken to the youngster from Wales, ignore the Scotch, and take a dash of Dinneford's after the other kind.

A. C.—Counter-irritation is a good thing therapeutically, but presidentially my Pata-nt is Peace.

O. C.—Take it with the Norwich brand

W. G. C.—The line of least resistance is the most comfortable. Take it politically; otherwise mind your own business.

W. S. G. J.—Don't cut, and stick to my new motto, "Defence and Defiance."

J. F. H.—Be a Mason as well as a man.

J. H.—Keep your eye on Chamberlain, and listen to the member for Salisbury.

W. H.—Make your own galenicals, and support the parent body.

J. J.—Only speak when you are spoken to.

W. M.—Read the "Extra" daily, and avoid pharmaceutical politics as much as you can.

G. T. W. N.—I consider it an impertinence to discuss the matter until the committee reports.

C. J. P.—Cultivate the social side of pharmaceutical organisation, and do as you are told at headquarters.

A. L. S.—When we peptonise the draft it will agree better with you.

A. S.—"Let brotherly love continue."

D. S.—Ca' canny, my lads; the branch is no' dead yet.

C. S.—Hear all sides, especially mine.

J. T.—Have opinions of your own, and fear not to express them.

A. C. W.—Clause 4 is the kernel of the Bill. Stick to that, and leave the widow's mite alone.

J. R. Y.—Do not touch the accursed thing—until you are compelled to.

Although we have heard sentiments like the foregoing, we cannot vouch for their authenticity as messages of hope for the new century.

## COOPERS HILL.

The Secretary of State for India Council has intimated that the following members of the staff at the Royal Indian Engineering College, Coopers Hill, will be required to vacate their appointments in the college at the end of the next Easter term, as the Board of Visitors has decided to remodel the course of studies at the College with a view to reducing the present excessive cost of the staff and increasing the efficiency of the teaching:—Mr. T. A. Hearson, M.Inst.C.E., Professor of Hydraulic Engineering, &c.; Mr. H. McLeod, F.R.S., Professor of Chemistry; Mr. W. N. Stocker, M.A., Professor of Physics; Mr. A. H. Heath, Ass. M. Inst.C.E., Assistant Professor of Engineering; Mr. T. Shields, M.A., Demonstrator in Physics; Mr. P. Reilly, Demonstr. Mech. Laby.; Mr. J. C. Hurst, Lecturer in Accounts. These gentlemen have memorialised the Secretary of State, suggesting an inquiry, and stating that no member of the staff has been consulted respecting the changes proposed in the curriculum, also that they are at present in ignorance of what those changes are, and of the recommendations which have been made by the Board of Visitors.

## INTERNATIONAL HOMŒOPATHY STANDARDS.

As long ago as August 14, 1886, we reported that Mr. J. W. Wyborn, F.C.S., of Messrs. E. Gould & Son, homœopathic chemists, Moorgate Street, E.C., had communicated to the Homœopathic International Convention, held at Basle in that year, a paper advocating international standards for homœopathic preparations. One of the suggestions that Mr. Wyborn made was that the British Homœopathic Phar-

macopœia should be submitted to the American Institute of Homœopathy for approval as a basis for an International Homœopathic Pharmacopœia. Quite recently that suggestion has been carried into effect, and the Institute has compiled a Pharmacopœia in which the British standards are substantially adopted. French and German manufacturers of homœopathic medicines have been stubborn in regard to the matter, and declined to come into line. We now learn from a circular sent out by Messrs. Boericke & Tafel, the leading homœopathic house in the United States, that they have now resolved to follow the Institute's example. This firm hitherto had opposed the British standards, and their agreement is of considerable importance because they import very largely from Germany, and thus Germans will be compelled to follow the British standards which they have ignored.

## LOTTERIES.

Local authorities seem to be determined to put down schemes of chance as advertisements by retailers. We reported one case last week, and another is printed on page 21. A third case, in which a public-house keeper and his barman were defendants, was heard at Lambeth on Thursday. They had sold tickets for turkeys, cigars, and other Christmas fare. Mr. Hopkins said he was clearly of opinion that the selling of the tickets was illegal, and fined the defendants. We note this case as an additional warning to all whom it may concern.

## CACODYLATE OF SODIUM.

The flood of recommendations of cacodylate of sodium as a remedy for phthisis which has recently shown itself in the lay press has caused Dr. Wm. Murrell to give a note of warning as to the use of such a potent remedy. Dr. Murrell goes so far as to say that cacodylate of sodium is a dangerous remedy, and gives a case that has occurred in his experience which seems to prove it. The patient after eleven 1-gr. doses, extending over four days, exhibited symptoms of arsenical poisoning, and although the garlic smell of the breath disappeared within twenty-four hours of leaving off the drug, there was left behind loss of power in the left leg and arm. The dose given was about one-third the minimum recommended by Galliard and other French physicians.

## CINCHONA CULTIVATION.

Prof. Verne, of Grenoble, in the course of an interesting report on a scientific mission to British India and Java, says he finds the Java method of cultivation in advance of the British Indian plan both as regards the cultivation of the bark and the manufacture of quinine. The report concludes that Ledgeriana Moens is most suitable for cultivation, that Succirubra should be limited, and other species abandoned, and that if the trees are not barked till they are ten or twelve years old it not only ensures the preservation of the plantations, but a bark rich in quinine. Stress is also laid on the necessity of establishing quinine factories in the country where the cinchonas grow, so that small pieces of bark which would otherwise be wasted can be advantageously utilised. The cultivation of cinchona, the report finishes by saying, is only suited for tropical and subtropical countries, a warning perhaps to the French Government not to be reckless in regard to the French colonies. The report appears in the *Jour. Phar. et Chem.*

PATERSON DRUGGISTS ORGANISE.—Seventeen out of the twenty-eight druggists in Paterson, N.J., met on December 6 and decided to affiliate with the N.A.R.D. to stop cutting prices. The new association will be known as the Paterson Retail Druggists' Association, and the following officers were elected:—President, Mr. G. E. Pellett; Vice-President, Mr. A. Nussey; Treasurer, Mr. L. Kent; Trustees, Messrs. C. C. Smith, R. Loveland, and Dr. J. A. Brown. It was also decided that the Executive Committee prepare a schedule of prices to be presented at the next meeting.



## The Official Concentrated Liquors.

By FREDERICK BASCOMBE, F.I.C.

**A**LTHOUGH but little has been written in reference to the *Liquores concentrati* of the B.P., 1898, it is generally admitted that the greater number of these preparations are very unsatisfactory if made according to the official instructions. I agree with Alcock and Abraham in condemning particularly the calumba and rhatany liquors. Liq. krameria conc. has been aptly described as "an excellent coaguline." Liq. calumbæ conc. is a most unsightly product, and not only deposits freely, but often in keeping shows signs of fermentation; one batch gave a decided acid reaction with litmus. Evidently the quantity of spirit ordered is insufficient to act as a preservative.

It is somewhat remarkable that senega is so favoured as to have a special mixture of 45 and 20 per cent. alcohol: one would have thought that the equivalent in 90-per-cent. alcohol and water would have been equally easy to manipulate.

To carry out in detail the processes in the B.P. for preparing the liquors would necessitate "a day-and-night service," and if the directions for senna are strictly adhered to, in all probability, especially in hot weather, abundant fungoid growth will be observed in the percolator long before the required volume has been collected. We are told in the preface that out of the many experiments performed nine of the more successful liquors have been recognised, and from this the only conclusion to be drawn is that the others must have been poor indeed.

With a view of getting some idea of the loss in extractive due to deposition, I have estimated the solid residue in each kind of liquor after standing one week, and again after setting aside for a year. The results are shown in the annexed table. It will be noticed that the loss is greatest in senega, senna, krameria, and calumba:—

—	Sp. gr. at 15·5° C.	Extractive at 100° C.	Extractive after stand- ing a Year
Liq. calumbæ conc. ...	1·015	5·85	3·05
Liq. chirate conc. ...	0·999	4·56	3·86
Liq. cusparia conc. ...	1·016	9·65	8·18
Liq. krameria conc. ...	1·008	7·47	5·17
Liq. quassia conc. ...	0·979	0·25	0·25
Liq. rhei conc. ...	1·036	13·67	12·56
Liq. sarsæ co. conc. ...	1·038	11·91	10·26
Liq. senegæ conc. ...	1·048	20·16	16·39
Liq. sennæ conc. ....	1·015	10·28	8·66
Liq. serpentaria conc. ...	1·002	5·25	4·97

## Liquid Extract of Cascara B.P.

By GEORGE F. MERSON, F.C.S.

**I**N consequence of the attention recently drawn to the quality of the official liquid extract of cascara sagrada I was induced to make a comparative examination of a series of trade samples obtained retail, with a view to finding whether or not there was a reasonable degree of uniformity in this article.

The question has been raised as to whether the proportion of alcohol ordered in the official formula is sufficient, and doubts have been expressed as to its keeping properties. Several makers state that to remedy this defect they increase

the proportion of spirit from  $\frac{1}{5}$  to  $\frac{1}{4}$  or thereby. This is borne out in the subjoined table of results. Personally I have never experienced any trouble through fermentation, and am inclined to the opinion that a carefully-prepared extract will keep for any reasonable length of time in our home climate—variable though it may be. With lots for export the case, of course, is different.

In all ten samples were examined, eight of them the produce of well-known London and provincial wholesale houses, and two of them made in the back shop of a retail pharmacy. In determining the proportion of extract (dried to constant weight in water-oven) it is essential to continue the heat until constant weight is attained, and this is conveniently and accurately done by operating upon 1 c.c. in a thin flat-bottomed porcelain capsule, of such size that the measured liquid will just be sufficient to spread itself over the whole bottom of the capsule. When the residue is perfectly dry and cold it is seen to have a cracked appearance, and will readily scale off the capsule. This is a convenient means of ascertaining whether it is ready for weighing. It is desirable, however, to check by reheating for a further short period, and again weigh. If the extractive be simply evaporated till "easily powdered," concordant results cannot be obtained, as a residue-extract, cooled so that it shall not absorb moisture mean while, will powder easily and yet lose a further considerable percentage of moisture on again heating. The results of the comparison are remarkable for the lack of uniformity which the samples exhibit. The appended tabulated list will make this apparent.

No. 8 presented an abnormal appearance. It was thick and syrupy, and compared with the others of very high sp. gr. (nearly 1·2), and the reason was not far to seek. The contents of the capsule in the water-oven refused to harden. Whilst the other lots were perfectly dry, this lot remained as a thick syrupy extract, which on examination and making allowance for an average yield of dry extractive, represented about 25 per cent. by volume of glycerin. Alcohol was entirely absent. This sample was purchased in a retail pharmacy as B.P. liquid extract, and was manufactured by an historic house. It may be that it is an "improved" preparation; yet it is not what one expects when the official article is asked for.

No.	Sp. Gr. at 60° F.	Grammes Dry Extractive per 100 c.c.	Sp. Gr. of Distillate	Per Cent. Absolute Alcohol by Volume
1	1·04099	19·12	0·9715	24·58
2	1·06475	24·58	0·9770	19·28
3	1·04970	20·40	0·9750	21·19
4	1·05467	28·45	0·9680	27·68
5	1·07824	28·60	0·9760	20·24
6	1·06213	24·35	0·9773	19·03
7	1·05813	23·58	0·9771	19·08
8	1·19853	53·80*	...	...
9	1·06156	23·17	0·9773	19·03
10	1·05486	18·82	0·9813	15·55

\* 25 per cent. glycerin or more.

From this table it will be seen that 23 to 25 per cent. of dry extractive (w/v) is an average yield. This factor, however, as likewise the sp. gr. and spirit-content, is by itself insufficient as a test of quality, although it perhaps affords the readiest means of checking the fluid-extract, and if used in conjunction with sp. gr. is a fairly reliable guide. A high sp. gr. does not necessarily imply deficiency of alcohol (No 5), nor does a low one indicate a low yield of dry extractive (No 4). It should be noted also that increase of the proportion of alcohol decreases very appreciably the



percentage of extractive, owing to precipitation by the spirit. To summarise:—

An average liquid extract should have:

- (1) Sp. gr. at 60° F. approximately 1.0615;
- (2) Should yield, treated as above, from 23.5 to 25 grammes dry extract per 100 c.c.;
- (3) And contain about 19.25 per cent. absolute alcohol by volume.

## Stability of Ipecacuanha Preparations.

By H. WIPPELL GADD.

THE stability of the official galenical preparations of Ipecacuanha has been questioned by many pharmacists, and pathetic pictures have been painted of the dire results to patients when the wine fails to do its duty. The results of more recent experiments, however, do not confirm these statements, and although they are not complete enough to be conclusive, they are offered as evidence that some preparations of Ipecacuanha can be, and indeed have been, kept for a considerable time without deterioration. The following is a concise statement of my results:—

*Sample A. Liquid Extract of Ipecacuanha.*—Made in February, 1900, and estimated on February 17, yielded 2.3 per cent. alkaloids. Again estimated June 21 with same yield.

*Sample B. Ipecacuanha-wine.*—Made from A in B.P. method, and filtered March 10, 1900, estimated on June 21, yielded 0.102 per cent. alkaloids. The same wine not filtered, and made on March 10, 1900, was estimated in December, when it yielded 0.1 per cent. alkaloids.

*Sample C. Ipecacuanha-vinegar.*—Made on March 10, 1900, yielded 0.103 per cent. of alkaloids on June 21.

It is evident, therefore, that there has been no appreciable loss of alkaloidal strength, even after keeping for some nine or ten months, and doubtless the physiological activity, if one were sufficiently devoted to science to try it, would be found to be equally satisfactory, or, rather, effective. No special precautions were taken as to storing the preparations, and the wine was made from a sherry, which gave decided reactions for tannin, and which was not treated in any way to detannate it.

## Festivities.

On Friday evening, December 28, Messrs. W. P. Bowman and Frank Boyce, proprietors of the firm of Messrs. Goodall, Backhouse & Co., entertained their travellers and others to dinner at the Conservative Club, Leeds. Mr. Bowman occupied the chair, and Mr. Boyce the vice-chair, and the entertainment was of the highest order. The efforts of Messrs. Gilling, Atkinson, Crook, and Pearson as *raconteurs*, followed by an adjournment to the billiard or whist room, kept the ball rolling successfully to a late hour.

### THE ANNUAL "EXTRACT" DINNER.

The seventeenth of the series of monster entertainments annually provided by Messrs. Newball & Son, of Hyson Green, Nottingham, for their employes took place at the works on December 28. The programme this year shows that the standard of former essays is well kept up, for we note that it comprised twenty-eight songs, five recitations, one duet, a farce, "The Boots at the Swan," and the comic operetta, "The Blind Beggars." The dramatic productions were, as usual, entirely got up and played by the Mason-Deville Dramatic Club, this being the sixth production by that company. The programme itself is an excellent sample of printing, and does much credit, not only to Messrs. Newball & Mason's printing department, but to the taste and ingenuity of those responsible for its literary contents.

## Legal Reports.

### Merchandise-marks Act.

#### WORCESTER SAUCE.

AT North London Police Court on December 28, Messrs. G. & S. Bracknell, sauce-manufacturers, Suffolk Place, Snowfields, S.E., were summoned for having in their possession Worcester sauce to which a false trade-description had been applied, and for selling the article to a firm of grocers in London Fields. The case for the prosecution was that the defendants had sent out their own article in bottles on which was moulded the name of Holbrook & Co., the manufacturers of Worcester sauce. The defence was that the defendants purchased the business from a manufacturer named Herbert, who had been in the habit of buying second-hand bottles from the Bottle Exchange, and some of the bottles did have the name of Holbrook upon them. In every case, however, the name was covered with one of Herbert's labels and a plain stopper was used, and the outer cover also bore Herbert's label. Moreover, Holbrook's sauce was sold at 6d. and Herbert's at 2½d. In giving his decision, Mr. Fordham (the Magistrate) said he could not hold that a man who had used bottles bearing the name of another manufacturer had acted innocently, or had taken reasonable precautions to keep outside the scope of the Act. On the summons for selling he should impose a fine of 2l. 2s., with 3l. 3s. costs, and on the other summons 2s. costs only.

### Prize Competitions.

AT Bolton Police Court on December 27, John Alfred Thornley, carrying on business as a druggist at 5 Halliwell Road, Bolton, was summoned for keeping open shop for the purpose of a lottery. The offence consisted of giving to each purchaser of a box of pills a coupon entitling the holder to participate in a prize competition. Defendant was warned to discontinue the sale of the pills under such conditions, but persisted in disposing of the coupons. A fine of 10s. and costs was imposed.

## Failures.

Re WILLIAM FLYNN, Annan, N.B., Chemist.

LIABILITIES, 205l. 13s.; estimated net assets, 140l. 5s. Amongst the creditors are the following:—

	£	s.	d.
Barracough & Co., Leeds ...	...	3	0
Blyton, Astley & Co., Manchester ...	...	13	0
Evans, Sons & Co., Liverpool ...	...	13	0
Grieve & Sons, Dalbeattie ...	...	0	10
Macfarlane & Dickson, Edinburgh... ..	...	7	0
Rutherford, John, Annan ...	...	9	19
Silverlock, H., London ...	...	1	0

### REPORT FOR 1900.

In the statistical table published by Mr. Richard Seyd, F.S.S., the number of failures announced during the year 1900 has been 9,224 (5,008 bankruptcies and 3,633 deeds of arrangement); 868 of these are in the financial, wholesale, and manufacturing branches of trade, 7,773 in retail trade and professional pursuits, and 583 Scotch trust deeds (54 wholesale and 529 retail). Fourteen wholesale druggists have failed during the year, against 4 only in 1899. In the drysaltary trade there were 34 failures to record, against 28 only the previous year. Of retail chemists and druggists 57 failed (35 deeds, 22 bankruptcies), showing a decrease of 1 on the returns for 1899. There have been 3 failures in the ranks of opticians, an increase of 2 on the previous returns; while surgeons, physicians, and dentists, who are bracketed together, show only 32—a decrease of 3 on the 1899 figures. During the year 1,983 limited companies were wound up, 1,004 voluntarily, 623 on account of liabilities, 246 for the purpose of reconstruction, and 116 by order from the Court. Of these 922 were in the wholesale, and 8,302 in the retail trade.

FRENCH CAFÉ CUSTOMERS treat themselves indiscriminately to strychnine, quinine, and every known acid that a doctor would hesitate about recommending without consulting a *confrère*. So says the *Sketch*, and we mention the matter as a specimen of ignorance.



## Deed of Arrangement.

**Gale, William Gillam**, 5 Hilderthorpe Terrace, Bridlington, chemist and druggist. Trustee, Frederick E. Johnson, Hull, consulting chemist. Dated, December 22; filed December 28. Liabilities unsecured, 115*l.* 4*s.* 7*d.*; estimated net assets, 20*l.* The following are scheduled as creditors:—

	£	s.	d.
Allison, Johnson & Foster, Hull ...	12	0	0
Ayrton & Saunders, Liverpool ...	10	0	0
Bleasdale (Limited), York ...	57	0	0

## Gazette.

### Partnerships Dissolved.

**Mudd, B. W., and Rendall, P. J.**, under the style of Mudd & Rendall, Ewell and Cheam, Surrey, physicians and surgeons.

**Trebilco, A. J., and Verrier, A. H.**, under the style of A. J. Trebilco & Co., Bristol, chemists and druggists.

### The Bankruptcy Acts 1883 and 1890.

#### ADJUDICATIONS.

**Rhein, Benjamin Louis**, Plympton Road, Brondesbury, N.W., and Duchess Street, Portland Place, W., doctor of dental surgery.

**Williams, Richard John**, Carmarthen, chemist and licensed victualler.

#### A TRUST DEED.

**Flynn, William**, chemist and druggist, trading as Brember & Co., at Annan, N.B., has granted a trust deed on behalf of his creditors. Trustee, Mr. E. Dunlop, solicitor, Lockerbie.

## New Companies & Company News.

### Gazette Notice.

The Board of Trade has gazetted the following new charges, chiefly in respect to Section 14 of the Companies Act, 1900:—

For registering any mortgage or charge created by a company, if not exceeding 200*l.*, 10*s.*; exceeding 200*l.*, 1*l.* In the case of a series of debentures, registered under Sub-sections 4 and 5 of Section 14, these fees shall be charged on the first debenture, and a further fee of 6*d.* on each subsequent debenture of the series.

For each inspection of the register of mortgages and charges, 1*s.*

For registration of each of the following documents, 5*s.* (1) Declaration of compliance with the requisitions of the Companies Acts, (2) consent to act as director of a company, (3) list of persons who have consented to be directors of a company, (4) declaration made on behalf of a company that the conditions of Section 6 (1) of the Companies Act, 1900, have been complied with, (5) return of allotments made by a company, (6) report pursuant to Section 12 of the Companies Act, 1900, (7) memorandum of satisfaction of mortgage or charge, (8) application for certificate of incorporation when no prospectus is issued, (9) any contract filed with the Registrar pursuant to Section 2 (1) (ii.) or Section 7 (1) (b) of the Companies Act, 1900, (10) copy of prospectus filed with the Registrar pursuant to Section 9 (2) of the Companies Act, 1900, (11) certificate of registration of any mortgage or charge after the first certificate, (12) copy of any memorandum of satisfaction given pursuant to Section 16 of the Companies Act, 1900.

A new form E, to be used in making the list and summary of members and capital prescribed by Section 26 of the Companies Act, 1862, is also gazetted.

**A. TAUNE & CO. (LIMITED).**—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business of photographic-paper and silk manufacturers, makers of photographic apparatus and materials, &c. The first directors are R. A. Lehmann and C. T. Lehmann.

**EDINBURGH LEAD AND PAINT COMPANY (LIMITED).**—Registered at Edinburgh. Capital 20,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers of and dealers in lead and other metals, paint, colour, and varnish, and the business of oil merchants, boilers and refiners, and drysalts. H. Harrow is the first director. Registered office, 16 Young Street, Edinburgh.

**DORMER, DUNN & DALE (LIMITED).**—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire the business of Dormer, Dunn &

Co., and to carry on the business of mineral-water trade furnishers and sundriesmen, ginger, spice, and chemical importers and dealers, &c. S. H. Dunn and H. I. Dale are permanent managing directors. Registered office, 14-20 St. Mary Axe, E.C.

**AUTOMATIC MENTHOL AND TOILET-SUPPLY COMPANY (LIMITED).**—Capital 2,000*l.*, in 1*l.* shares (800 preference). Objects: To acquire the business carried on at 37 Crescent, Salford, as "The Automatic Menthol and Toilet-supply Company," and to manufacture and deal in fly-catchers, menthol-cases, dyes, soap, oils, varnish, drugs, toilet-articles, &c. Registered office, 37 Crescent, Salford, Lancashire.

**ELLIOTT & SONS (LIMITED).**—Capital 50,000*l.*, in 10*l.* shares. Objects: To carry on the business of photographic dry-plate and paper manufacturing and photographic silver, carbon, and bromide printing and enlarging, and to adopt an agreement with Elliott & Son. The first directors are J. J. Elliott, Park Road, Barnet, manufacturer, and H. J. Elliott, Park Road, Barnet, gentleman. Remuneration as fixed by the company.

**JOHN BATT & CO. (LONDON), (LIMITED).**—Capital 150,000*l.*, in 10*l.* shares (6,000 6-per-cent. cumulative preference). Objects: To adopt an agreement with G. A. Koettgen and H. Stephens, and to carry on in the United Kingdom and elsewhere the business of general merchants, &c. The directors will number not fewer than four or more than eight; the first are G. A. Koettgen, H. Stephens, J. Greimer, N. Parham, J. Hannes, and A. S. Walters. The two first named are permanent directors with 250*l.* each per annum as remuneration. Qualification 500*l.* Remuneration of ordinary directors, 150*l.* per annum.

**KITLENE SYNDICATE (LIMITED).**—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business of chemists, druggists, drysalts, oil and colourmen, makers of photographic and other apparatus and materials, &c. The first subscribers are:—J. M. Towitol, Wardrobe Chambers, Queen Victoria Street, E.C., engineer; F. S. Springeth, Ashfield, Hawkhurst, gentleman; J. B. Rembach, 2 Long Lane, E.C., merchant; G. L. Font, The Elms, Teddington, gentleman; W. Ellis, Wargrave, Berks, gentleman; W. Webb, Carlton Chambers, 8 Regent Street, S.W., agent; and A. F. Davis, Farnham Royal, Bucks, engineer. Registered office, Wardrobe Chambers, 1461 Queen Victoria Street, E.C.

**TIDSWELL & CO. (LIMITED).**—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business of chemists, druggists, dealers in medicines and proprietary articles, mineral-water merchants, oil and colour men, dealers in toilet articles, &c. The first subscribers are:—O. Manley, 3 Brunswick Place, Hanley, traveller; Mrs. E. A. Manley, 3 Brunswick Place, Hanley; J. Taylor, 25 Old Hall Street, Hanley, confectioner; Mrs. E. Taylor, 25 Old Hall Street, Hanley; W. E. White, 50 Piccadilly, Hanley, butcher; F. Tidswell, 70 Market Street, Fenton, chemist; and Mrs. E. J. Tidswell, 70 Market Street, Fenton. Registered without Articles of Association. Registered office, 78 Market Street, Fenton, Staffordshire.

**ELLIS WHITTAKER (LIMITED).**—Capital 5,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on by Joseph Whittaker, Mary Whittaker, Ellis Whittaker, and George Whittaker, at 32 Regent Road, Salford, as "Ellis Whittaker," and to carry on the business of chemists, druggists, drysalts, oil and colour men, manufacturers of photographic and other apparatus and materials, &c. The first subscribers are:—J. Whittaker, 96 Regent Road, Salford, surgeon; Miss M. Whittaker, Mowbray House, Ellesmere Park, Eccles; Ellis Whittaker, Mowbray House, Ellesmere Park, Eccles, drysalter; G. Ellis, Mowbray House, Ellesmere Park, Eccles, drysalter; Miss S. H. L. Whittaker, Mowbray House, Ellesmere Park, Eccles; A. Brown, 19 Victoria Crescent, Eccles, cattle-salesman; and Mrs. R. Brown, 19 Victoria Crescent, Eccles. Registered without articles of association.

**BADISCHE COMPANY (LIMITED).**—Capital 50,000*l.*, in 10*l.* shares. Objects: To take over certain of the assets in Manchester, London, and Glasgow, and elsewhere in the United Kingdom, of the Badische Anilin und Soda Fabrik, and to carry on the business of chemists, chemical manufacturers, refiners, drysalts, oil and colour men, dye-makers, shippers, merchants, agents, &c. The first subscribers are:—M. Bock, 2 Samuel Ogden Street, Manchester, agent; J. Robertson, 2 Samuel Ogden Street, Manchester, agent; M. Boesler, 2 Samuel Ogden Street, Manchester, chemist; R. W. Williamson, 71 Princess Street, Manchester, solicitor; T. H. Davies-Colley, 71 Princess Street, Manchester, solicitor; A. P. Stott, 22 Bush Lane, E.C., agent; and H. Zilz, 22 Bush Lane, E.C., agent. The first directors are Dr. H. Bruck, S. V. A. Kichelen, and R. Hüttenmüller. Qualification, 1 share. Remuneration as fixed by the company.

**PETER SPENCE & SONS (LIMITED).**—Capital 150,000*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of alum-manufacturers and manufacturers of other chemical products, manufacturing chemists, importers and exporters of chemical products, &c., carried on by F. M. Spence and D. D. Spence at Manchester, Goole, and elsewhere, as "Peter Spence & Sons." The subscribers



are:—F. M. Spence, Dalfield, Hale, Cheshire, chemical engineer; D. D. Spence, Claremont, Southport; Mrs. F. M. Spence, Dalfield, Hale, Cheshire; Mrs. E. Spence, Claremont, Southport; H. Spence, Audley House, Broad Road, Sale, Cheshire, chemical-manufacturer; R. G. Brooke, Upton Grange, Macclesfield, engineer; M. Spence, Dalfield, Hale, Cheshire, engineer; H. A. G. Brooke, Addison House, Victoria Park, Manchester, gentleman. The first directors are F. M. Spence (chairman), D. D. Spence, and H. Spence. Each of the two first-named may retain office so long as he holds 5,000l. shares. Ordinary qualification, 1,000l. Remuneration as fixed by the company. Registered office, Manchester Alum-works, Holland Street, Manchester.

**MACDONALD'S DENTAL AND MEDICAL COMPANY (LIMITED).**—Capital 50,000l., in 1l. shares. Objects: To carry on the business of artificial teeth, eye, and limb makers, manufacturers of boots, corsets, bandages, chairs, stretchers, ambulances, dealers in anatomical, orthopaedic, surgical, and dental appliances of all kinds, chemists and druggists, &c. The first subscribers are:—C. W. Dowswell, Broadfield Road, Hither Green, S.E., chemist; G. B. Harteg, Sandown, Isle of Wight, dentist; J. W. Whitworth, 59b Cockburn Street, Radcliffe, Lancs, chemist; G. H. Price, 118 New Oxford Street, London, dental surgeon; A. H. Richmond, M.B., 34 Woburn Square, W.C.; E. Corbett, L.R.C.P., 192 Princess Road, Moss Side, Manchester; and E. Banks, Melrose, Chatham Road, Swinton, dental surgeon. James Macdonald is the first director. Qualification, 500l. Remuneration as fixed by the company.

**STEPHENSON BROTHERS (LIMITED).**—Capital 80,000l., in 1l. shares. Objects: To adopt an agreement made by this company with G. B. Stephenson and G. Speight, and to carry on the business of chemists and druggists, drysalts, chandlers, oil and colour men, soap manufacturers, manufacturers of paints and colour, grinders, makers of and dealers in scientific apparatus of all kinds. The first subscribers are:—G. B. Stephenson, Gasby Road, Bradford, Yorks, oil-merchant; G. Speight, 18 Park View Road, Bradford, oil-merchant; E. D. Stephenson, 30 Pemberton Drive, Bradford, manager; H. Stephenson, 22 Woodville Terrace, Bradford, manager; R. Broadley, 17 Garden Terrace, Bradford, cashier; H. Monkman, 49 Southfield Square, Bradford, commercial traveller; and C. Stephenson, 6 Cousen Road, Bradford, art-master. The first directors are G. B. Stephenson and G. Speight. Qualification of first directors, 5,000l.; of subsequent directors, 2,000l.

**IDRIS & CO. (LIMITED).**—The new issue of "A" preference and "A" ordinary shares was over-subscribed.

**BOOTS' PURE-DRUG COMPANY (LIMITED).**—The issue of 100,000 1l. 6-per-cent. preference shares is reported to have been over-subscribed.

**H. W. CARTER & CO. (LIMITED).**—The annual meeting of the shareholders was held at Bristol on December 28, Mr. H. W. Carter presiding, when the report (particulars of which were given in our issue of December 22, page 1006) was unanimously adopted. It was also agreed that the remuneration of the directors for the year ending October 31, 1901, should be 300 guineas. The chairman was re-elected director.

**SECCO FILM (BRITISH AND COLONIAL) COMPANY (LIMITED).**—At the second annual meeting of shareholders held at Winchester House, E.C., on December 28, the directors reported that the working capital at their command had been exhausted in carrying out the works, and that further capital will be required in order to discharge the outstanding liabilities of the company and the working-expenses incidental to supplying the market with the film and bromide-paper. The accounts showed that the expenditure on profit-and-loss account from August 1 to November 30, 1900, was 1,504l. 10s. 7d., and that the income (including 122l. 13s. 1d. and 407l. 4s. 2d. stock) was 554l. 5s., a sum of 950l. 15s. 7d. being carried to organisation and development account. Mr. T. C. Hepworth, chairman of the company, in the course of a lengthy statement, explained that certain directors who had not held shares to qualify them for the position had resigned. He also stated that the reason why the company's works are not insured is that ether is used in making the films, and the English insurance companies asked 2l. per cent. of premium, whereas the German offices charged only 6s. 8d. per cent. Referring to the operations of the company, the chairman said the work hitherto having been largely of an experimental character, no exact cost of production could be given. In the early days of the manufacture they saw that the same machinery would

produce bromide-paper, and this at a time when the film was not in demand, and they had therefore turned their attention to this, for which there was a demand in Denmark, which offered to take all such paper they could make. This manufacture would be carried on during the winter, when the production of the film would not be required. The company was now in the position of a man who had built a beautiful ship which was compelled to remain on the stocks for want of money to launch it. The directors were at a standstill for want of funds, and they had the position under serious consideration. The nominal capital of the company was 100,000l. in 1l. shares, of which 7,500l. still remained unissued. It was proposed to issue those as preference, and thus raise the money wanted to carry on the works; or to raise that amount by debentures, or to reconstruct. The German company, which held 20,000l. in shares, had agreed to give up its holding so as to enable the company to go on. After further explanations it was agreed to circularise all the shareholders to this effect.

## Colonial and Foreign News.

**MR. BAETCKE**, of Berlin, has been appointed President of the German Apotheker-Verein, in place of Mr. Bellingrodt.

**MISS LESSNEWSKAJA** has obtained sanction to open a pharmacy in St. Petersburg, she being the first lady to obtain such a privilege in the annals of Russian pharmacy. She intends to employ only lady assistants, and also to teach girl-apprentices.

**THE NEW PH.G.**—With the 1st of January the new (fourth) edition of the German Pharmacopoeia came into force. All changes in names of drugs, &c., must be made on all bottles, jars, &c., by December 31, 1902, and in the case of poisons by December 31, 1901.

**GERMAN PHARMACEUTICAL SOCIETY.**—At the last meeting in Berlin Dr. Thoms was re-elected President, and on the occasion of the tenth anniversary of the Society five honorary members were elected—viz.: Dr. E. Biltz, Erfurt; Dr. Bruno Hirsch, Dresden; Dr. G. Vulpius, Heidelberg; Dr. C. C. Keller, Zurich; and van Ledden-Hulsebosch, Amsterdam.

**A LABORATORY ACCIDENT.**—Dr. J. J. Abel, Professor of Pharmacology in the Johns Hopkins University, Baltimore, was seriously injured recently by an explosion in his laboratory. Dr. Abel was endeavouring to secure a partial vacuum with a diminished-pressure apparatus when, it is thought, a sudden influx of gas into the chamber caused it to burst, and the flying fragments struck him in the face, injuring his eyes.

**TO PREVENT COUNTER-PRESCRIBING.**—In Hamburg a society has been organised to oppose and put down indiscriminate dabbling with drugs in an attempt to treat diseases which have not been diagnosed by a medical man. The society, composed of both the druggists and physicians of that city, and called the "Kunpfuschereicommission," intends to investigate illegal prescribing, the limitation of the druggist's liberties in this respect, and the regulation of the manufacturing of patent and proprietary remedies.

**STATE QUININE.**—The Italian Chamber of Deputies has accepted a Bill making the sale of quinine a State monopoly. It will be sold by pharmacists and by all sellers of other State monopolies (tobacco and salt) provided they are not within 500 metres of the nearest pharmacy. It will be put up in tablets of 20 centigrammes each, ten tablets in an air-tight tube, and sold at the rate of 40 centesimi per tube for the hydrochloride, and 32 centesimi for the sulphate. The profit accruing from the sale will be devoted to devising means for the prevention of malaria. A law is also under consideration to compel all employers in malarial districts to provide the latest remedies for curing it, and to give the necessary medicaments to their workmen free of charge. They must also see that proper dwelling-places and sickwards are provided, and for this they will get loans at low interest from the public treasury and a reduction in taxes.



## Dispensers' Association.

THE annual meeting of the Public and Poor-law Dispensers' Association was held on January 2, the President (Mr. F. Noad Clark), in the chair. Mr. G. F. FORSTER (Hon. Secretary), in presenting the report of the Council said the membership had greatly increased, and now stands at between 60 and 70. Despite the increased outlay the finances are satisfactory, and there is an increased balance in hand. The attendance of members at the monthly meeting has been excellent, and the Association now boasts of the best attended meetings connected with the craft. The Association, besides their meetings, has come to be regarded as an information bureau by members, and the secretaries are always willing to give advice on points of interest to the craft. On Wednesday, January 30, the Council have arranged a smoking concert to be held in the concert and reception rooms of Stone's Restaurant, the Broadway, Ludgate Hill. The function will be under the direction of Messrs. Duff and Spencer, and a successful concert is anticipated. The Treasurer's statement shows a balance in hand of £2. 13s. 10d.

The following officers were elected for the ensuing year:—President, Mr. F. Noad Clark; Vice-President, Mr. R. Welford; General Secretary, Mr. G. F. Foster; Poor-law Secretary, Mr. W. E. Miller; Treasurer, Mr. Hewitt; members of Council, Messrs. Duff, Denmar, Goodall, Spencer, Mallard, and Lindsay.

The PRESIDENT then gave a

### SHORT RESUMÉ

of the principal events of the year, touching primarily on the increased strength which had been gained by amalgamation with the Poor-law Dispensers' Association. Having reviewed the work of the Session, he alluded with regret to the loss to the Association by the death of Mr. Currie, of Manchester (who died at Bloemfontein from enteric fever), and Mr. Fryer, of Holborn, two of their members, he then reminded the Poor-law members that according to Rule 8 of their constitution they may at any time call a meeting to discuss matters affecting their particular interests, and although nothing of importance had arisen during the year to necessitate such a meeting, there were evidences of dissatisfaction, and notwithstanding the successful efforts of the previous year, there was still room for improvement in their position, particularly as regarded emoluments. It would be a question of policy in the future as to whether they should not endeavour to obtain a further increase of salary to make up for the deduction occasioned by the Local Government Board having taken into account the value of emoluments and rations as part of their salary. He thanked the hospital and County Council members for their excellent attendance and interest shown, but suggested that there yet remained much to be done in securing a more representative membership amongst hospital-dispensers. In this connection Mr. Clark referred with pleasure to the appointment of Mr. Langford Moore to the post of head dispenser at St. Bart's. In conclusion he said:

My policy during the past year has been one of consolidation, and I believe in this connection we have cause for congratulation. During my term of office I have carefully avoided wounding the susceptibilities of some of our members on the qualification question, feeling that it was a subject fraught with difficulty, and on some occasions, of danger to the well being of our Association. But it is useless to shut our eyes to events which are transpiring in the world of pharmaceutical politics, and there appears to me to be every indication that at no very distant day, some definite course of action will be decided upon by the authorities after instituting an inquiry into the conditions of appointments held by dispensers in the public services.

Mr. Clark closed his address by thanking the members of the Council for their loyal support and assistance, and particularly Mr. Forster (Hon. Secretary of the P. D. branch) for his never-failing energy and enthusiasm in the interests of the Association.

There was no discussion worth speaking of on the address, and after the Chairman had been thanked for it and Mr. Duff had given a few details of what was to be looked for at the forthcoming concert,

Mr. MILLER (St. Pancras), speaking as the Poor-law Secretary, regretted the division that had taken place

amongst them on the qualification question. He then went on to remark that, although they first organised with the idea of increasing salaries, they now desired to advocate the advancement of pharmacy in Poor-law institutions, by introducing new and useful preparations to the medical staff and deprecating the introduction of proprietary medicines into their dispensaries. This led to an animated controversy, but it was ultimately agreed that the subject was a fit one for full discussion at one of the future meetings of the Association.

## Veterinary Notes.

By M.R.C.V.S.

### Internal Parasites.

THE uncertainty of anthelmintic remedies has been commented upon in these pages and in "Veterinary Counter-practice," where some excellent hints are given. A really reliable vermifuge for horses and cattle, easy of administration, without any special preparation of the subject by fasting, would make the fortune of anyone, when once proved and made known to owners of live-stock. Some of the remedies employed first in Abyssinia, and subsequently by Europeans, have had but scant trial, yet it is beyond doubt that in the former country, where parasitism is so rife, much success attends the crude methods employed to get rid of these uninvited and undesirable guests. In illustration of our slowness to utilise information obtainable from so-called outsiders, we may point to the use of thymol in veterinary-practice. To the certain knowledge of the writer, who was at one time in correspondence with one of King Theodore's prisoners (Dr. H. Blanc), thymol was introduced to the West as a vermicide nearly a generation ago, yet who had heard of it in this connection until a lady, despairing of her Arab colts, acted on the advice of the quondam French prisoner of Theodore's, and found thymol to be the remedy for that class or division of worms known as strongles, especially the *S. tetracanthus*, a small blood-red creature of  $\frac{1}{2}$  inch to 1 inch long. I cannot, at this date, recall the form in which thymol was introduced, and in all probability the Abyssinians employed plants containing the drug and not the crystalline compound now so familiar and prepared from oils of thyme and horsemint. (The latter name, in the light of recent experiment with the drug, would seem to be particularly appropriate.) As a matter of practical dispensing, I can say that, as thymol is insoluble in water and rather sparingly so in spirit, the dose of 15 gr. (for a colt) readily dissolves in 1 oz. of proof spirit, and can be subsequently administered in a pint or less of milk.

The difficulty with blood-feeders, such as strongles, is not so much to find a drug that will kill them as to bring it to their notice. If they habitually resided in the intestines, it would be as easy as serving a writ of ejectment on a lodger, but their wandering habits necessitate finding an agent which shall act through the medium of the circulation without danger to the host. Here is the rub. The *tetracanthus* and the *armatus* are provided with boring-apparatus, with which they pierce the intestine, and wander at their own sweet will into new pastures, taking up a residence oftentimes at the junction of a bloodvessel, such as those given off from the posterior aorta to supply the liver and pancreas. Something like half the asses in this country are so affected, as evidenced upon the dissecting-tables of our veterinary colleges, where they are used instead of horses.\*

Less difficulty attaches to the destruction of the ascarides, whose habitat is the large intestine chiefly. These, like the *tetracanthus*, bury themselves in the lining membrane of the gut, and while young remain comparatively out of reach of drugs which prove inimical to their seniors. This is an important point to bear in mind in the treatment of a horse with intestinal parasites, as one or two doses may expel a considerable number and deceive us into the belief that we have got rid of the whole colony, whereas we have but removed the wandering adults, and must persist with

\* Donkeys are a more convenient size and structurally the same, while healthy subjects with "three legs and a swinger" can be purchased for a small sum.



our remedies. The horse-owner who seeks advice and medicine eagerly at first, will too often become indifferent when a large harvest of worms has been garnered; but this is just the time to impress him with the desirability of destroying the new crop, before it has had time to propagate. The man who lets charlock or thistles seed is the one who permits the reproduction of worms, unless the importance of the matter is drummed into him.

There is a king of the tribe of strongles known as *Strongylus gigas* or the giant strongle, whose ultimate destination is the kidney, but, fortunately for our equine friends, this parasite is seldom met with. He, like the parasites which live in the bloodvessels or in the ducts of the liver, cannot be dislodged by the actual contact of substances like santonin, dolichos, and powdered glass. The experiments of a number of independent workers point to thymol as the remedy for parasites outside the digestive and respiratory canals, and the original quantity, tried with so much success by the Hon. Miss Dillon, may safely be quadrupled in the case of horses. It should, however, be stated that a sufficient number of dogs have not been treated with it to arrive at any satisfactory conclusion, and that, in one instance at least, the drug acted as a powerful narcotic, producing somnolence little short of coma. In the space at my disposal a glance only can be given at the subject of horse worms, but the great *Ascaris megalocephala* must not be forgotten, as he is the next in size to the *Strongylus gigas*, being often 1 foot in length, and occurring in great numbers without causing any apparent inconvenience to his host. A physic-ball will usually dislodge this variety of round worm, but a drachm of santonin is a desirable addition to the ball. He is a robber, and many a horse remains thin from giving up to a large number of these worms the results of laborious digestion of bulky material containing but little true aliment. The tapeworms of horses are relatively small as compared with the size of the worm of the same class in dogs and pigs. *Areca*, *oleum filicis maris*, *aloes*, *buchu*, and *iron* are the remedies most favoured for this species.

It will be seen from the foregoing remarks that the identification of worms is desirable before undertaking to eject them; or we should at least assure ourselves as to the group to which the worms belong. The turpentine and oil which many find successful with the common *Ascaris megalocephala* will be of little use for those smaller worms with migratory habits, or for those flat segmented parasites known as tapeworms.

We have to remember that there are three principal methods of eliminating internal parasites—(1) by poisoning them with substances which they either voluntarily or accidentally partake of; (2) by contact of mechanical or other irritants, which cause them to let go their hold and be carried away in the *fæces*; (3) by rendering their abode uninhabitable. To the first class belong turpentine, thymol, and *aloes*; to the second *dolichos*, powdered glass, santonin; and to the third sulphates of iron and copper, wormwood, and other vegetable bitters.

The non-success of well-proved remedies, such as *areca* for tapeworm, is often difficult to explain, unless we accept the disappointed angler's excuse for an empty creel and assume that they (the worms) are "not on the feed." We know as a matter of experience that the same remedy will on another occasion, and with no better preparation in the matter of diet, have the desired effect. When all the remedies belonging to the first and second classes into which I have divided them have been tried and failed, a course of iron often succeeds. It at first acts too asstringently on the host, but this can be provided against by modifying the diet. The digestive canal of the horse soon becomes accustomed to the drug, while the worms find their habitat increasingly undesirable. If they do not voluntarily quit a process of degeneration sets in; they cease to grow and propagate, and are passed out in a shrunken and discoloured state, while there is reason to believe that many are disintegrated and dissolved in the *succus entericus*.

OUR STUDENTS' CORNER.—A competitor (209/63), writing on October 10, says:—"Since your last competition I have been successful in the Major examination, and I take this opportunity of thanking you for the great service the 'Students' Corner' has been to me in my studies."

## Recent Wills.

ACTON.—The estate of the late Mr. George Acton, pharmaceutical chemist, of 10 Cornmarket, Worcester, who died on November 13, is valued at 36,242*l.* 1*s.* 9*d.*, the gross personality amounting to 34,297*l.* 3*s.* 4*d.* Mrs. Elizabeth, widow, Mr. J. Acton, testator's son, and Mr. H. H. Harrington, Worcester, are the executrix and executors. The testator bequeathed a life annuity of 20*l.* to his sister Charlotte, and to Mrs. Acton 50*l.*, the use and enjoyment of his house in Lansdowne Crescent and its furniture, and an annuity during her widowhood of 300*l.*, or in the event of her remarriage a legacy of 1,000*l.* The testator left various railway stocks in trust for his daughters Florence and Dorothy Charlotte, and the residue of his property in trust for his said son F. G. Acton.

ELLIS.—The estate of the late Mr. Thomas William Ellis, chemist and druggist, High Street, Loddon, Norwich, who died on July 19 last, has been proved by Mrs. Georgina Ellis, widow and sole executrix. The gross value of the estate is 1,243*l.* 15*s.* 2*d.*, and the net value of the personality 186*l.* 1*s.* 10*d.*

HEMMING.—The will of the late Mr. George Thomas Hemming, chemist and druggist, Longton, Staffs, who died on September 22 last, has been proved in the Principal Registry by the executors, J. Ward, James Preece, and Henry Hawley, solicitor. The gross value of the estate is valued at 3,895*l.* 3*s.* 1*d.*, with a net personality of 1,638*l.* 9*s.* 4*d.* Amongst the bequests are 500*l.* to the vicar and churchwardens of St. John's Church for chimneys to the church clock-tower; 500*l.* to the Longton Cottage Hospital; 500*l.* to the Sutherland Institute Building Fund; and 100*l.* to the Longton Sick Nursing Society.

KITSON.—The will of the late Mr. Edward John Kitson, chemist and druggist, of 18 St. George's Square, Worcester, who died on December 30, 1899, was proved in the Worcester Registry by Ellen Kitson, widow and sole executrix. The gross value of the estate is 4,785*l.* 4*s.* 3*d.*, with a net personality of 976*l.* 15*s.* 7*d.*

## The Doctor's Trouble.

THE controversy in Glasgow regarding the right of medical men to keep open shop under the supervision of unqualified assistants is still proceeding, and has reached the stage in which the local newspapers are devoting articles to the manner in which these shops and chemists' shops are conducted. The *North British Daily Mail* of Saturday last, in an unsigned article, deals with the queer side of the controversy. It tells how, when a woman goes into a chemist's shop with a prescription, and an unqualified man takes it, she goes back in half an hour, when the medicine is handed over to her by a qualified man. This is keeping on the right side of the law, says the writer, and he finds no difficulty in reversing the order of things to show that when a qualified man compounds the medicine, and an unqualified assistant hands it over when the qualified man is at his dinner, the law is broken. After similar hiar-splittings on the seeming anomalies of the law, the writer goes on to give some solid facts, from which we quote the following:—

No effort is here being made to show that deaths are frequently or ever due to mistakes made by chemists. Many will doubtless be astonished to learn, on the contrary, that it is twenty-nine years ago since a chemist's mistake had fatal results in the city, and that was in the Cowcaddens district. It is rather keeping in mind the extraordinary quantities of cocaine, laudanum, morphine, and other narcotics sold all over the city, but chiefly in better-class localities, where the purchasers are nearly all of the gentle sex, that makes it appear desirable for legislation to restrict this sale as to quantity. A chemist of wide experience interviewed on the subject yesterday said the best thing to do would be to restrict the sale to registered chemists, and get the purchaser to sign name and address for all narcotics, over and above the half-dozen deadly poisons meantime scheduled as "deadly," and which require signature.

The public would be astonished to hear how few chemists keep qualified assistants. Yet everybody one meets seems quite unconcerned and happy, and, despite the newspaper controversy, go on playing billiards, dining out and quaffing headache-powders just the same as before. [This, we understand, does not refer to the assistants.—EDITOR.]

Prosecutions are all a matter of chance apparently. Jones, having a grudge against Smith, may make a complaint, or indeed, state a case, and then the pharmaceutical official in Edinburgh acts, but rarely until then.

In the town of Coatbridge only one doctor keeps a qualified assistant in his shop, while in the neighbouring burgh of Motherwell, no doctors have shops, and the drugs are supplied by chemists. Coatbridge may be said to have no qualified chemists' assistants.



## Reviews.

*Electric-wiring Tables.* By W. PERREN MAYCOCK, M.I.E.E.  $4\frac{1}{4} \times 3\frac{1}{4}$ . Pp. 144. Waittaker.

A LITTLE book of tables, intended primarily for those engaged in electric-light fitting, but of use to a larger circle of readers. The tables begin with the legal standard wire-gauge, and go on to such things as the computation of the currents that will fuse various-sized fuse-wires and meter-calculating. Notes are also given about systems of wiring, fuses, and the comparative cost of electricity and gas.

*The Law of Bankruptcy. Showing the Proceedings from Bankruptcy to Discharge, also the General Rights of Creditors and Debtors, and the Duties of Trustees in Bankruptcy; with an Appendix of Costs, Fees, and Percentages, and a Table of Cases Cited.* By C. E. STEWART, M.A., of the Inner Temple and of the South-Eastern Circuit, Barrister-at-Law.  $7 \times 4\frac{1}{2}$ . Pp. 213. 2s. net. London, 1900: Edingham Wilson.

A USEFUL BOOK for business men. The author is one of the leading authorities on bankruptcy law, and he describes in orderly fashion the requisite steps in bankruptcy proceedings. Deeds of arrangement are also briefly considered.

*A Handy Book on the Law of Husband and Wife; Engagements to Marry; Property and Settlements; Wife's Separate Rights; the Spouses' Liabilities; Protection and Maintenance; Divorce and Separation; Children.* By JAMES WALTER SMITH, B.A. (Oxford), LL.D. (London), of the Inner Temple, Barrister-at-Law. New and revised edition.  $7 \times 4\frac{1}{2}$ . Pp. 266. 2s. 6d. net. London, 1900: Edingham Wilson.

A BOOK more than forty years old, which has been in regular demand all that time, and is now brought up to date, scarcely requires commendation. It deals with a department of law which rarely gives trouble to pharmacists, as far as we can judge from our legal queries and reports. It comprises twenty chapters and appendices, and gives sound advice as well as a plain exposition of the Acts with which it deals, and the Court interpretations thereof.

*The Commercial Law.* By W. DOUGLAS EDWARDS, LL.B., author of "A Compendium of the Law of Property in Land." Small 8vo. Pp. viii + 227. 2s. London, 1900: Methuen & Co.

THE commercial series which Messrs. Methuen & Co. are publishing under the editorial guidance of Dr. H. B. de Gibbins contains no more useful volume than this one by Mr. Edwards on commercial law. It begins with an instructive description of English commercial law in respect to its scope and structure, then goes on to deal with contract law, commercial contract, agency, partnership and companies, transfer of goods, money securities, ships, trademarks, goodwill, patents, copyright, actions, arbitration, and bankruptcy. The book is a concise and lucid manual which every business man should have upon his desk, and we commend it especially to young pharmacists who, having finished their examinations, desire to get a general knowledge of the laws which bear upon business.

*The Volatile Oils.* By E. GILDEMEISTER and FR. HOFFMANN. Translated by Ed. Kremers, Madison, Wis. Pp. viii + 733. London: Schimmel & Co., 27 Mincing Lane, E.C.

WHEN the German edition of this work was published we mentioned that it was substantially the first modern exposition of the subject, especially on account of the fact that it deals with essential oils in the light of the researches that have been made during the past twenty years. These researches, it need scarcely be said, have completely altered the complexion of the chemistry of essential oils. Indeed, they have opened up a line of synthetic research which may have an exceedingly important influence upon the cultivation of natural flowers during the twentieth century. The work is, however, more than a mere record of scientific advancements. The history of essential oils, with special relation to the commercial development, was adequately treated in the

German edition by Dr. Hoffmann, and it is to us a matter of regret that, in preparing an edition in English, it has been considered necessary to sacrifice a great deal of this historical matter. Whole pages are omitted, many half-pages, and occasional paragraphs; for example, the histories of saffron, zedoary, galangal, ginger, cardamoms, pepper, cubebs, sandalwood, mace, and cassia are omitted, and to these we could add others. It is true that English readers have an excellent history available in "Pharmacographia," but there is a completeness about the historical matter in the German edition that makes it worthy of being presented to English readers. We must say, however, in fairness to the editor and translator, that the purpose of the English edition appears to be less classical than commercial, and, if that is so, the more compact book will equally satisfy the requirements. There is no question as to the value of the book, especially to business men. It gives them complete information regarding the origin of all essential oils, their chemical and physical properties, and, in many instances, the extent to which they are used and produced, and the fluctuations in prices. It is well illustrated, and is produced in handsome style.

*Aids to Practical Pharmacy for Medical Students.* Adapted for the Examination in Practical Pharmacy of the Conjoint Board and for General Use. By A. CAMPBELL STARK. Revised according to the British Pharmacopoeia of 1898.  $6\frac{3}{4} \times 4\frac{1}{2}$ . Pp. 170. 2s. (paper); 2s. 6d. (cloth). London: Baillière, Tindall & Cox.

THIS book is a new and revised edition of the author's "Practical Pharmacy for Medical Students," which it replaces. The articles of the materia medica are each dealt with under the heads of production, characters, recognition, prescribing, dose, incompatibles, and preparations. The book would be a useful pocket Pharmacopoeia for chemists' apprentices, who should soon obtain a good knowledge of official drugs if they set themselves a daily task of so many pages or drugs from its pages.

*Die Glykoside; chemische Monographie der Pflanzenglycoside nebst systematischer Darstellung der künstlichen Glykoside.* By Dr. J. J. L. VAN RIJN. Pp. xvi. + 511. Berlin: Gebrüder Bornträger, 1900.

IN these days of specialism the monograph in pamphlet form has given way to the elaborate treatise, and in view of the extremely rapid advance in our knowledge of the compounds, which, ten years ago, were usually classified under the head of "Compounds of unknown constitution" in the text-books, such treatises have now become necessities. This new work of Van Rijn fills a distinct gap, for hitherto our information on this branch of chemistry has been scattered and inaccessible. The author's name is so well known in connection with this subject that it would be very difficult to have selected one more fitted for the work. The book is divided into two parts: the first dealing with the series of artificially-prepared glucosides which have seen the light so largely through the work of Emil Fischer, and the latter dealing with the natural plant glucosides. The section on artificial glucosides covers all that is known of these bodies, commencing with the simple methyl glucosides, prepared by condensing the sugar with the alcohol, right through the series to the complicated compounds of the various sugars with the substituted aromatic aids. In regard to the section on natural glucosides, we may draw attention to the fact that the author has elected to classify botanically. Although many continental authorities prefer to use the purely chemical system, there can be no doubt that, in the case of such bodies as alkaloids, glucosides, and essential oils, a botanical classification possesses many advantages, and on the whole we prefer it. The book is especially distinguished by two features—(1) freedom from even trivial errors, and (2) close revision up to date. With the exception of Jowett's discovery of salinigrin, which took place after the book went to press, we know of no work on the subject of any importance which has not received due attention. The errors we have found are so trivial that it would be a waste of space to mention them, and we shall only draw attention to one point. Rhamnose is given indiscriminately the formulæ  $C_6H_{12}O_6$  and  $C_6H_{12}O_5$ , without explanation. This is confusing to the student, and any water of crystallisation should be expressed as such.





**TO CORRESPONDENTS.**—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

#### The Pharmacy Bill.

The Federation of Local Pharmaceutical Associations has this week sent out the following letter to affiliated associations:—

The Executive trust that your Association will shortly meet to discuss the Council's new Pharmacy Bill. Experience has shown that the greatest obstacle to an acceptable amendment of the Pharmacy Acts has been the want of unity amongst registered chemists. The gratifying success which has attended reasonable claims concertedly put forward proves the necessity for unity and moderation. The Council Bill appears to be an earnest effort to reform the laws relating to pharmacy in such a way as to meet the requirements of the public welfare and interest, and the just claims of registered chemists, and it is hoped that your members will think fit to give a general support to the Bill. This hope is expressed on the grounds that a Bill, to have any chance of passing through Parliament, must protect the public from irregularities in all shops where poisons are sold and dispensed, by extending the provisions of the Act of 1868, and adapting them to later conditions, and that the Council Bill is calculated to meet these requirements by means which should receive support from the majority of registered chemists.

(Signed) JOHN SMITH, Chairman.  
WILLIAM L. CURRIE.  
E. SAVILLE PECK.  
G. T. TURNER.  
GEO. F. MERSON, Hon. Secretary.

Secretaries of associations which are not affiliated with the Federation should bring this letter under the notice of their members.

#### The Difference.

SIR,—Attention has often been called to the difference between the treatment dealt out to qualified and unqualified men in our law courts, and we have recently had some glaring cases. In the first place, we have the Dundee case (*C. & D.*, December 15), where an unqualified man sold a preparation of aconite, every step of the transaction being a glaring violation of the Pharmacy Act, and the Sheriff let the culprit off without a penalty. If the man had been qualified, and had forgotten to take a signature or adhere to other regulations in the Pharmacy Act, we may be quite sure the offence would not have been regarded as a technical one. In fact, in some courts qualified men have been subjected to a long process of "badger and bullyrag," wound up with various suggestions of police proceedings, when there was no departure at all from the strict letter of the Act. The Littleborough case raised a point which I have thought of often. It is this: So long as all the regulations are complied with, a qualified man is in no way to blame if suicide follows the sale of a poison. The Pharmacy Act was not passed to prevent suicide, but to prevent accidents. The moment we allow that a qualified man is responsible for suicide, we lay him open to abuse from magistrates and endless jokes about ropes and beer from the general public. Qualified men do prevent suicide in many cases, by being more careful than the Pharmacy Act requires them to be; but magistrates ought to know this, and moderate their language accordingly. I see one of the medical journals says that chemists sell poison to children. What ought to have been said was that the Pharmacy Act does not prevent this. It is emphatically not true that chemists generally sell poisons to children. No self-respecting chemist would hand poison to a child; but, in refusing to sell poisons to children and suspicious-looking persons, we are going beyond the Act, and it is doubtful if a case could not be raised against us.

A worse case than either of these was the dispensing fatality

at Sheffield. A doctor ordered his unqualified dispenser to compound a draught for a patient. Nobody can tell whether the story told by the doctor, or that told by the dispenser, was the correct one, but the result was death to the patient. Now nobody can deny that this death was the result of real carelessness. Yet there is no word of censure, no word of police proceeding, no word of forwarding particulars to the Medical Council. Then we had the Manchester case, in which a doctor has four surgeries attended to by housekeepers, whose daughters hand out nux vomica without supervision. The Magistrate in this case did send information to the Medical Council, but the doctor ignored the Court. There is here another point which I think is doubtful; that is whether it is really legal for a doctor to employ an unqualified person. The Pharmacy Act exempts the doctor himself, but not his housekeeper or coachman. I think a case ought to be raised. A room is really an open shop, and there is no sense in pharmacy law at all if housekeepers, grooms, maidservants, and other ignorant people are not affected. There is really more danger in a doctor employing an unqualified man than there is in a chemist doing so. A chemist has at least a written prescription before him, whereas a doctor's assistant in many cases only gets a verbal order, or a half-written prescription. There can be no doubt that the anomaly of all this is becoming plainer to the public, and the early half of the coming century will see great changes in regard to it.

Dumfries.

JAMES REID.

#### An Appeal.

SIR,—May I ask for a little space in which to make a special appeal to assistants? There has been established for nearly three years now an organisation for their benefit, which can be made by them a powerful commercial centre of mutual aid. All that is wanted is that men should enrol immediately, then an important effort will be made to redress some of the grievances from which the trade has suffered so long. The organisation referred to is the Chemists' Assistants' Union, 60 Paddington Street, W. Every effort is being made to make it the controlling centre of assistants, and the opening of a new century is a very appropriate period to make a special appeal to assistants to aid us by their influence and numbers to further our good cause. Any assistant who cares to write may receive a pamphlet, setting forth the aims and objects of this Union, and any member of an Assistants' Association who will send his receipt for his current subscription may receive a card of membership free, entitling him to all the privileges of our Union. As we intend shortly to offer a very bold front to what is now universally considered unjust competition, we ask assistants to support and further our efforts on their behalf.

Yours faithfully,

C. E. PICKERING,

97 High Street, Marylebone, W.

President.

#### Compound Tincture of Benzoin.

To a paragraph on this tincture printed on page 515 of our DIARY a comment is appended—viz, "A very unconvincing analysis which might have been successfully disputed." In justice to Dr. Alfred Hill, of Birmingham, we wish to say that he has given us particulars of the analyses which show that the comment was unnecessary and uncalled for. We shall be glad if those who have the DIARY will make the requisite correction.

#### Income-tax Payments.

SIR,—With the income-tax at 1s. in the pound, the amount payable by persons of even small means is very considerable, being one-half more than last year. It is, therefore the more necessary to ascertain without delay whether or not it is possible to obtain a reduction in the amount payable, or, where the tax has been paid, a repayment of a portion. As most of your readers who are engaged in business are now ascertaining the amount of their profits for the year 1900, will you allow us to remind them that, if such profits show a diminution, they may be entitled to the repayment of a considerable portion of the income-tax paid in respect of the same? Many submit to overcharges, having failed on previous occasions to get their assessments reduced. In most cases the reason why they have failed is that they have



not furnished proper accounts. Thousands of people pay taxes for which they are not liable, particularly those whose incomes are derived from property and investments where tax is deducted before being paid to the recipients, or when dividends are paid "free of income-tax." Where the income of the current financial year has all been received, claims can, in many cases, now be made for four years. We shall be glad to advise any of your readers, gratuitously, whether they can make a claim for repayment, if they send us full particulars of their incomes and a stamped addressed envelope.

Yours faithfully,

THE INCOME-TAX ADJUSTMENT AGENCY (LIMITED).  
12 and 13 Poultry, E.C., January 1.

### The Etymology of Antimony.

SIR,—In reply to Mr. Berdoo's statements regarding the etymology of antimony published in your issue of November 24, I should like to make one or two notes. Objects of metallic antimony have been found in prehistoric graves, but the word is first found in the Latin translations of Geber's original Arabic MSS. Its properties were described by Basil Valentine in the "Triumphal Car of Antimony" (1480), but I believe the narrative, no doubt mythic, concerning the derivation from *anti* and *mo'in* to be somewhat different from that stated by your correspondent. Basil Valentine found that pigs fattened on the antimonial waters, and on trying similar experiments on his hungry monks, he was surprised to find his well-meant kindness attended with fatal results. The word is probably of Arabic origin, and "antimonium" is the latinised form of it introduced by the translator of Geber's writings.

Nevertheless, the etymology is not yet definitely settled.

Yours truly,

Weston Park, Crouch End, N., GEORGE RUDOLF, B.Sc.

SIR,—I beg to bring to Dr. Berdoo's notice the following quotation from Paris's "Pharmacologia":—"Whether antimony is the stimmi or stibium of the ancients has been a matter of conjecture, for Pliny, in speaking of its preparation observes: "Ante omnia urendi modus necessarius, ne plumbum fiat." This plumbum, however, was evidently the revived metal antimony, with which the ancients were unacquainted, and therefore mistook it for lead; besides, the word "plumbum," like many others, was used as a general term; thus, according to Pliny, tin was called "plumbum album." According to Lemery's "Chemistry," the alchemists "highly esteemed antimony. They imagined it to be an imperfect gold, because nothing would dissolve it but aqua regalis. Sometimes they called it the Red Lion, at other times the Wolf, because it turns red and devours. By others it has been designated Proteus, the Sacred Lead, the Lead of the Philosopher, and the Lead of the Wise, because it was believed to be akin to Saturn, who devourer his children as this doth metals."

In early times the leaves of books were without a running title, numbers of pages, &c. The first words of the chapters were often used as a heading, a custom still in vogue in the Psalter, as *Cantate Domino*, &c. Probably as science advanced a definite word was needed to distinguish this substance of many names. The alchemists were acquainted with Pliny; the sentence "Ante omnia" may have headed a page; at any rate, to the learned there was a connection, while to the unlearned it was enigmatic and obscure, which would be greatly in its favour, for lexicographers say the word "gibberish" is derived from Geber, an Arabian prince and alchemist of the seventh century, on account of the obscurity of his language. So may not "anteomnia" have been the earlier form?

The black sulphide or sulphuret of antimony was long regarded as the metal itself, and was used in the purification of gold. Paracelsus says "sicut antimonium finit aurum," and, according to Lemery, "the purification of gold by means of antimony is better than any other. Is it not probable that, on account of its great attraction for other metals and their inability to isolate it, the early chemists concluded that it could not exist alone, and called it *anti-moros*, antimonos, a name which anteomnia would readily suggest? Basil Valentine first made it known in the metallic state.

Paris says: "Basil Valentine led the way to the internal

administration of metallic medicines by a variety of experiments on the nature of antimony. If, however, we may credit a vague tradition, he was extremely unfortunate in his first experiments on his brother monks, all of whom he injured, if not killed. Those who have ears for etymological sounds will instantly recognise the origin of the word antimony—*anti-moroxus*," but as the title of Valentine's book is "Cursus triumphalis Antimonii," and Paracelsus calls it antimonium, "antimonachol" and "antimonochos" do not appear to have been in general use. Notwithstanding, *moroxus*, living alone, solitary, thus a monk, is derived from *moros*, alone. "The alchemists who lived in the old convents" were also monks and friars, and it is highly improbable that they would eat pigs which had "drank the poisoned water and died," for

What baron or squire,  
Or knight of the shire  
Lived half so well  
As a holy friar?

JOHN HICKMAN.

### Shop-warming.

SIR,—For two years I have been thinking over the best way of warming the shop, and have just concluded that what I really want is a *multum in parvo* pharmaceutical cookery-stove and heating-apparatus.

I have seen nothing of the sort advertised, and as your "Art of Dispensing" makes no reference to any such apparatus, I suppose it is not obtainable.

The apparatus should consist of a boiler heated with fire, to which should be connected the following appliances, to be heated by hot water or steam generated from the boiler:—

1. Pipes for warming the adjoining shop. The apparatus would not be in the shop.
2. A supply of hot water.
3. A drying compartment, of which the temperature would be under control, for drying bottles and drugs.
4. A heating-surface on which a pan of syrup, a 50-lb. tin of vaseline, or a batch of cold cream could be left without injury.
5. A condenser for obtaining a supply of distilled water. This being a fixture, and incapable of use for anything but aq. dest., would doubtless be permitted by the Excise.

I would be glad to hear of such an apparatus, and it seems practicable.

Yours truly,

J. E. A. (251/45.)

### Dragon's-blood as a Charm.

SIR,—The following information regarding dragon's-blood may be of interest to your readers. In this district it is used as a "charm" by a certain class of young women for the purpose of inducing the "young man" to declare his intentions. It has to be "powdered" upon a fire, and while burning the following doggerel is to be recited:—

'Tis not this blood I wish to burn,  
But my love's heart I wish to turn,  
Hoping he'll have no rest or sleep  
Until he comes to me and speaks.

I am not informed as to the effect upon the victim, nor as to any time to be observed for the ceremony, but I am told that one girl who performed this mystic rite at midnight "saw something," in consequence of which she was ill for some days.

Yours, &c.,

Swansea.

ROBERT T. DUTSON.

### Appreciation.

SIR,—I have been without your journal for a twelve-month now and miss it so much that I cannot be without it longer. I enclose P.O. 10s. Please send it as usual.

F. C. (119/39.)

SIR,—I take this opportunity of saying how much I appreciate the handy series of books you have published for the trade, of which I have bought two sets, one for my son, and the other I retain.

T. S. (28/19.)

SIR,—As I am retiring from business I shall not require THE CHEMIST AND DRUGGIST any longer. In giving up this periodical I feel that I am parting with an old friend



that has helped me through many difficulties, and without its assistance I should oftentimes have been at a loss to keep pace with the forward march in our line of business. Unquestionably it is the best periodical devoted to our trade, and I cannot conceive any chemist being able to do without it—i.e., in the English-speaking places in the world.

Yours faithfully,  
E. P. (12.50.)

[This correspondent was one of our oldest Colonial subscribers.]

### Dispensing Notes.

A section for the elucidation of difficulties and interchange of views on dispensing-problems.

#### Quinine Precipitated.

SIR,—The following mixture gives a muddy precipitate, which clears on filtering, but re-precipitation soon takes place. The mixture will after being kept some time become mouldy. Can you give the reason, and can you suggest a way of mixing that would prevent re-precipitation?—

Quininae disulph.	...	...	3j.
Potass. iodidi	...	...	℥iv.
Ext. tarax. liq.	...	...	3vj.
Ext. cascara sag.	...	...	3iij.
Spt. ammon. co.	...	...	3iiss.
Tr. chirate	...	...	3iv.
Dec. sarsae co.	...	...	3j.
Glycerini	...	...	3vj.
Aq. ad...	...	...	3xvj.

QUININE. (2/20.)

[Quinine hydrate and hydriodide are precipitated. The mixture should not be filtered. Dissolve the potassium iodide in half the water, and to this add the sal volatile and tincture. Rub the quinine well in a mortar, then with the glycerin gradually added; add as much water, and transfer to a clean bottle; add the liquid extracts and decoction, then the iodide solution, and make up. Chloroform-water will preserve the mixture.]

#### A Nasty Pill.

2/8. *Phenol* wants to know the best way of dispensing pills as below, and also what chemical change takes place in rubbing the powders together:—

Acid. carbol.	...	...	gr. j.
Resin. guaiaci	...	...	gr. j.
Pulv. rhei	...	...	gr. ij.

Ft. pil. j.

[The phenol and resin liquefy, and the pill has to be treated like one of those mentioned in "The Art of Dispensing," ed. vi., pages 96-99. Mix the two together, add 6 gr. of powdered soap, then the rhubarb, and sufficient powdered liquorice to mass.]

#### The Prescriber's Intention.

SIR,—The following prescription was written by a physician of great standing. Does the doctor mean it to be made up as it is, as there is an incompatibility between the magnesium sulphate and the sodium phosphate?

Yours faithfully,

BLAIR. (255/58.)

Mag. sulph.	...	...	3iij.
Sodii sulph.	...	...	3iij.
Sodii phosph.	...	...	3ij.
Tr. capsici	...	...	3j.
Inf. quassiae ad	...	...	3viij.

[It is impossible for us to say whether the prescriber intended to have magnesium phosphate in the mixture, but there is no reason why you should not dispense it as written, as the resulting precipitate is not injurious.]

#### Emulsion Query.

SIR,—Would you direct me as to the best course to take in a prescription like this?—

Ol. ricini	...	...	3j.
Tr. opii	...	...	℥x.
Ft. emulsio, s.s.			

Faithfully yours,

O'S. (19/42)

[An acacia emulsion should be sent out. Information on emulsions is fully given in the "Art of Dispensing."]

#### The Troublesome Mixture.

Spt. am. co.	...	...	3vj.
Pot. brom.	...	...	3iiss.
Liq. bism.	...	...	3ij.
Fer. quin. cit.	...	...	3j.
Tr. aurant.	...	...	3ss.
Aq. ad...	...	...	3vj.

M.

SIR,—I have experimented on the mixture in your issue of November 24 last, and find that if the ferri et quinin cit. be dissolved with acid citrici 3ij. in 1 oz. of distilled water, and added to the previously dissolved potass. bromid. in an equal quantity of water, adding the spt. ammon. comp. and liq. bismuthi, allowing time for effervescence, diluting the tr. aurantii, and adding water to 6 oz., that I got a clear solution, which gave no precipitate after two days. I hope that it will be satisfactory in your climate.

Yours truly,

HENRY S. ADAMS.

Royal Pharmacy, Port of Spain, Trinidad, B.W.I.,  
December 20, 1900.

18/20. *Tenrub.*—There is sufficient acid in the solution of morphine hydrochloride to start effervescence in the bismuth carb. and pot. bicarb. mixture.

89/60. *Chemist.*—The ammonium chloride in the turpentine and soap-emulsion is bound to make it separate. It is a perfectly useless ingredient, and would be better replaced by  $\frac{1}{2}$  oz. of ammon. carb.

251/48. *Mehr Licht.*—We cannot say what is intended by pulv. zinci sulphocarbol. co., ordered in a prescription dated 1879.

26/11. *Cymro.*—Iodine and collodion are prescribed together as an application for ringworm and alopecia. If you had tried the mixture you would have found it compatible.

### Legal Queries.

Before sending in a query for reply in this section see if the subject is not dealt with in "The Chemists' and Druggists' Diary," 1900, pages 212-226, and pages 259-262.

17/12. *Pil.*—Actions in respect to dishonoured bills must be taken within six years from the date of liability.

12/62. *E. R. W. B.*—We see no reason why the Board of Inland Revenue should not allow you to make and retail without licence a medicinal wine containing 1 gr. of euquinine in each ounce. Give a sample, with the formula, to your local supervisor, and explain the matter.

239/2. *Juvenis.*—(1) You may not use patent-medicine stamps taken from unsaleable patents, but the Inland Revenue authorities allow for them under certain circumstances. (2) You may open a packet of stamped teething-powders and sell them separately.

24/44. *Inquirer.*—(1) A pharmaceutical chemist may insert a "Teeth Extracted" plate on his counter, and use the same words on his prescription-envelopes, without infringing the Dentists Act. (2) Salaries of qualified dispensers in the best London hospitals range from 100% upwards.

20/16. *Dorridge.*—Consult our DIARY, page 215, paragraph on "The Seller," which will make it quite clear to you that the names of servants are not required on the poison labels.

20/9. *Camper.*—We cannot repeat legal information which is given in our DIARY. Refer to page 224 under "Stamped Medicines."

20/44. *W. G. M.*—Presumably the lease was a repairing one, and if you succeeded to it, there is no alternative to paying for the repairs, unless you can prove that the previous holder of the lease was told not to repair the property because it is to be pulled down. The latter fact by itself does not free one from liability for dilapidations.



31/18. *B. J. F.* asks if it is legal and legitimate for a qualified chemist and druggist to carry on business in an assumed name? [It is considered to be so. Several pharmaceutical councillors carry on business in that manner.]

23/18. *A.*—If linseed, liquorice, and chlorodyne lozenges contain any scheduled poison they may only be sold by registered chemists and druggists; some lozenges, however, contain no poison.

### Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

12/54. *C. C. H. C.*—The recipe for an imitation of Seigel's syrup is amusing.

233/45. *G. F. G. G.*—Cheap French Polish as sample:—

Shellac	...	...	...	...	3xxiv.
Dragon's blood	...	...	...	...	3ij.
Spirit	...	...	...	...	Cong. j.

Dissolve.

17/62. *F. C. J. W.*—The glycerin-and-cucumber jelly is the only clear preparation of cucumber we know of. A fatty pomade would be more or less opaque when set.

216/46. *W. C. D.*—Liver-invigorator:—

Ac. nitro-mur. dil.	...	...	...	...	3ij.
Succ. taraxaci	...	...	...	...	3iv.
Tr. podophylli	...	...	...	...	3j.
Liq. strychn.	...	...	...	...	℥xxx.
Aq. chloroformi ad	...	...	...	...	3vj.

3ss. in water thrice daily.

255/36. *R. G.*—(1) Drug-houses could doubtless supply extract of ginger prepared by Idris's acetone method, or you could make it yourself. The paper was given in the *C. & D.*, August 13, 1898, page 296. (2) Faded water-colour drawings cannot be restored. (3) Animal fats are whitened by washing with hot water several times and well beating whilst they are cooling. Chlorine and such-like bleaching-agents are inadmissible.

224/5. *N. A.*—Strychnine Paste for destroying vermin is best made with a basis of lard and coloured with Paris green. The strychnine should be in the proportion of 1 in 10 to approximate in strength with commercial vermin-powders.

11/121. *M. C.*—Children's Powders.—You cannot improve on potass. chlor. as a fever-powder for children or on a mixture of hydrarg. subchlor. and sacch. lactis as an aperient or teething powder. There is no objection to the addition of a little pulv. ipecac. to the potass. chlor. if you say it prevents vomiting.

226/43. *Tannate.*—Digestive Pill for general retail:—

Pulv. ipecac.	...	...	...	...	3ij.
Pulv. capsici	...	...	...	...	3ij.
Sodii carb. exsicc.	...	...	...	...	3ij.
Ext. gent.	...	...	...	...	3ij.
Ext. quassia	...	...	...	...	3ij.
Pil. rhei co.	...	...	...	...	3ij.

Mix and divide in 4-gr. pills.

The dose is one or two at dinner-time.

3/37. *Salol.*—(1) Phenacetin in doses of 6 to 8 gr. is a safe headache-powder. (2) The safest Emmenagogues for Chemists' Sale are a mixture of equal parts of mist. ferri co. and dec. aloes co. and pil. aloes c. myrrh.

255/34. *F. C.*—Books on Bee-keeping.—Cheshire's "Bees and Bee-keeping," 2 vols., 16s. (Upcott Gill). The volumes are obtainable separately, the second one (on the practical management of bees) costing 8s. 6d. Webster's "Bee-keeping" is a shilling book by the same publisher.

227/68. *Radix.*—Boot-dressing Paste.—This contains both ivory black and aniline black in a basis of soap.

258/31. *Otipura (N.Z.).*—Milk-fever Cure.—The mixture for injection into the udder is a solution of potassium iodide; the lotion, a miscible coal-tar disinfectant.

220/47. *Student.*—Verdigris.—The fact that verdigris consists of a complex mixture of basic acetates and hydroxides of copper accounts for the apparent inconsistencies of textbooks in describing its composition. The proportions of mono-, di-, and tri-acetates of copper vary according to the process of manufacture. Blue verdigris consists chiefly of the monobasic acetate,  $(C_2H_3O_2)_2Cu_2O$ , and green verdigris of the dibasic acetate,  $2(C_2H_3O_2)_2Cu_2O$ .

252/72. *Asty.*—Infants' Soothing-syrup:—

Ol. anisi	...	...	...	...	℥viiij.
Tr. asafetida	...	...	...	...	3iv.
Syrupi	...	...	...	...	3viiij.

Shake the anise oil with the hot syrup, and when cold add the tr. asafetida.

The dose is from 10 drops to a teaspoonful. An equally good preparation is made with tr. chamomilæ 3ij. in place of tr. asafetida.

7/14. *Xmas.*—Worm and Condition-powder for horses.—This is what we make your sample to be composed of:—

Pulv. anisi	...	...	...	...	3iv.
Pulv. gentianæ	...	...	...	...	3iv.
Pulv. potass. nit.	...	...	...	...	3ij.
Sulphur. sublim.	...	...	...	...	3iv.
Pulv. zingib.	...	...	...	...	3ij.
Pulv. glycyrrhizæ	...	...	...	...	3iv.

M.

A tablespoonful for a dose.

14/58. *Zemo.*—(1) Relish (without onions):—

Capsicum	...	...	...	...	3ss.
Pimento	...	...	...	...	3ss.
Coriander-seeds	...	...	...	...	3ss.
Cloves	...	...	...	...	3ss.
Mace	...	...	...	...	3ss.
Salt	...	...	...	...	3iv.
Cinnamon	...	...	...	...	3vj.
Mushroom catsup	...	...	...	...	Oiss.
Treacle	...	...	...	...	Oj.
Indian soy	...	...	...	...	Oj.
Wine vinegar	...	...	...	...	Cong. j.

Grind the first seven ingredients together, and pour on them 1 quart of boiling vinegar, cover up, and when cold add the other ingredients. Shake occasionally for a month, and bottle.

(2) Curry-powder:—

Turneric	...	...	...	...	3iv.
Coriander-seeds	...	...	...	...	3xij.
Ginger	...	...	...	...	3ij.
Cinnamon	...	...	...	...	3ij.
Cardamoms	...	...	...	...	3ss.
Cayenne	...	...	...	...	3iss.
Black pepper	...	...	...	...	3vj.
Mace	...	...	...	...	3j.
Cumin-seeds	...	...	...	...	3ij.
Pimento	...	...	...	...	3j.
Cloves	...	...	...	...	3ij.
Mustard	...	...	...	...	3j.

Scorch the coriander, cumin, and mustard seeds; then grind all the ingredients together to a fine powder.

(3) Incandescent Gas-mantles contain thoria ( $ThO_2$ ), zirconia ( $ZrO_2$ ), lanthana ( $La_2O_3$ ), yttria ( $Y_2O_3$ ), and didymia ( $Di_2O_3$ ). The rare earths, from which the above are made can be had from Harrington Brothers, Oliver's Yard, 53A City Road, E.C.

19/12. *Ol. Jecoris.*—Skin-cream (without glycerin):—

Lanoline	...	...	...	...	3j.
Almond oil	...	...	...	...	3j.
White vaseline	...	...	...	...	3j.
Rose-water	...	...	...	...	3j.
Boric acid	...	...	...	...	3j.
Perfume	...	...	...	...	q.s.

Melt the first four ingredients together, transfer to a warm mortar, add the rose-water in small quantities at a time, then the boric acid and perfume; stir till cold.

248/3. *Herba.*—The address of the National Association of Medical Herbalists is 182 Sheffield Road, Barnsley.



11/31. *W. S.*—Bleaching Wool.—The yellow tint left in wool after scouring is removed by bleaching with sulphurous acid or hydrogen peroxide. The sulphurous acid is cheaper, and is used either in the form of gas—when sulphur is burnt in a chamber in which the wool is suspended—or in the liquid form. In the latter case the goods are first placed in a bath of sodium bisulphite and then in one of dilute sulphuric acid. Any slight yellowish tint that remains is counteracted by a final bath in solution of indigo: blue, being complementary to yellow, produces white.

2/24. *J. P. P.*—Glove-cleaning Paste:—

Curd soap ... ..	3j.
Water ... ..	3iv.
Oil of lemon ... ..	3ss.
French chalk... ..	3j.

Shred the soap and dissolve in the water by heat, then add the oil of lemon and French chalk.

232/12. *A. rated.*—(1) Ginger-wine:—

Bruised ginger ... ..	8 oz.
Raisins ... ..	4 oz.
Rinds of 7 lemons and 2 Seville oranges	
Loaf-sugar ... ..	18 lbs.
Boiling water... ..	6 gals.

Pour the boiling water on the ingredients in a tub, and cover up closely till next day, then add the juice of the lemons and oranges, and 1 oz. of isinglass; strain, and add two tablespoonfuls of yeast. Ferment three days and close the cask; set aside for six weeks, again strain, and four weeks later bottle.

(2) Ginger-wine (Non-alcoholic):—

Oil of orange ... ..	5j.
Tincture of orange ... ..	3viij.
Rectified spirit ... ..	3iv.
Tartaric acid ... ..	3viij.
Salicylic acid ... ..	3iij.
Loaf-sugar ... ..	lb. vj.
Caramel ... ..	3iij.
Water ... ..	Cong. viij.

Dissolve the oil of orange in the spirit, and pour upon the sugar contained in a large funnel. Pass through this a sufficiency of water to dissolve; add the rest of the water containing the tartaric acid, then the caramel, and finally the tincture containing the salicylic acid; set aside for a fortnight, and filter if necessary.

247/15. *Omn.* (Bombay).—(1) Six to 8 gr. of saponin is the quantity for 1 gal. of aerated-water syrup. (2) We do not know to what formula you are referring. (3) Capsicin dissolves in soluble essence of ginger. (4) Aqueous solutions of quillaia decompose on standing.

241/69. *A. C. B. S.* (Calcutta).—Books on Aniline Dyes.—Hurst's "Dictionary of Coal-tar Colours," 10s. 6d. (Heywood & Co.); Schultz & Julius's "Organic Colouring-matters," 21s. (Macmillan.) There is no book published giving exact directions for the manufacture of aniline colours; such details can only be gathered from the various patent-specifications.

249/70. *A. B.*—The top of the marble table can be re-polished with rottenstone, emery-powder, or putty-powder. Putty-powder is best. It is made into a thin paste with water, and rubbed on the marble surface with a thick felt or moleskin pad.

250/23. *Licentiate.*—Cough-mixture.—A mixture containing only 6 minims of chlorodyne in each tablespoonful is safe for adults. We never advise the administration of opiates to children; it would be better to have a special mixture for children's use.

243/36. *C. N.*—Ointment for Stings of bees and mosquitos.—The following gives a preparation like your sample:—

White wax ... ..	3ij.
Spermaceti ... ..	3iiss.
Flowers of camphor... ..	3j.
Olive oil ... ..	3iv.
Eucalyptus oil ... ..	3ss.

Melt the wax and spermaceti in a water-bath, and add the oil. Remove from the source of heat and stir in the camphor, and, when nearly setting, add the eucalyptus oil.

235/56. *Sanitas.*—The powder which your veterinarian supplied for Worms in a Cat is sodium chloride.

11/58. *Memo.*—The "Mauve-ink Dye" is a typewriter-ribbon ink. The basis is castor oil, and the colour (aniline violet) is in the proportion of about 1 to 4 of oil.

18/69. *D. J.*—The powder you send, used for adding to Fishing-bait, is chrome yellow.

214/3. *Potass.*—The sample of Cheap Cough-mixture is produced from a similar formula to that given in the *C. & D.*, January 13, page 73.

14/35. *H. E. E.*—The charge for the hire of an acetylene-generator and lantern-jet costing 2l. 7s. 6d. would be about 4s. 6d., including a supply of calcium carbide.

247/61. *Alumnus.*—The cheapest fixative for a horse's mane would be a strong tragacanth mucilage, or, if that was not effective, a spirituous solution of common resin would probably answer.

9/2. *Dispenser.*—Cachets are charged the usual powder-dispensing rates. See THE CHEMISTS' AND DRUGGISTS' DIARY, 1900, page 214.

15/74. *Verax.*—You enclosed no stamps. Your query is not suitable for this column. Advertise in our Supplement.

2/12. *Hypo.*—We have examined the powder which you describe as an old wife's Specific for Whooping-cough, and the chief ingredient we find is calcium carbonate. There are traces of ferric oxide, to which the colour is (at all events, partly) due, and possibly traces of an organic colouring-matter which we have not identified. There may be traces of some other ingredients, to identify which would require a larger sample and an analysis that we could not undertake.

11/7. *J. C. C.*—Boron Compound.—The powder you send us, which you say is used in brazing-operations, is essentially what you describe it—viz., a mixture of borax and boric acid. The former is present to the extent of about two-thirds and the latter to the extent of one-third. Any other ingredients are only present, we think, in traces, if at all. We have made no attempt to estimate the quantity of ultramarine, which is merely used for colouring-purposes, as you can easily add enough to give the same tint.

13/65. *Saccharum.*—The chief ingredient of the powder you send us, which you state is used by sugar-boilers to prevent crystallisation, is cream of tartar. There is a small quantity of lime salts present, but these may be merely impurities. There is also a small quantity of sulphates, probably in the form of acid sulphate of potash. We understand that such bodies are added to ensure the absence of free alkali in the boiling-process, but shall be glad of further information.

10/41. *R. T. F.*—Transparent Red Chlorodyne.—The following is from "Pharmaceutical Formulas":—

Chloroform ... ..	3ij.
Ether ... ..	3ss.
Tincture of cannabis indica ... ..	3j.
Tincture of capsicum ... ..	3j.
Hydrochloride of morphine ... ..	9j.
Oil of peppermint ... ..	℥xvj.
Dilute hydrochloric acid ... ..	3j.
Glycerin ... ..	3iij.
Water ... ..	3j.
Cochineal ... ..	a sufficiency
Rectified spirit ... ..	3xvj.

Mix in the usual way.

If you have not "Pharmaceutical Formulas" you should get it, for it will repay itself in a week or two.

9/55. *Nemo.*—Mist. Oleosa Balsamica.—You will find the recipe for this in "Pharmaceutical Formulas," page 552.

9/54. *Apprentice.*—Synonyms.—If you send thirteen 1d. stamps to Rouse Brothers, 61 Charlotte Street, London, W., you will get a book that gives you all the synonyms you want.



11/38. *Veto*.—(1) The luting-material for stoppers, as used by wholesale houses, is almond-cake, the residue from the oil-presses. (2) You can get flare-skins from Messrs. J Ewen & Son (see their advertisement), and split sheep-skins from any druggists' sundries house. (3) Remington's "Pharmacy" (Burrroughs, Wellcome & Co., 21s.) or Caspari's "Pharmacy" would suit you. See also THE CHEMISTS' AND DRUGGISTS' DIARY, 1898, for the article on "The Art of Pharmacy."

6/10. *R. W. B.*—(1) You will find information in regard to poultry in "Veterinary Counter-practice," published by us at 3s. 6d. (2) The "Freck" tablet-machine is good for the dispensing-counter. Messrs. S. Maw, Son & Thompson are the agents. (3) We have no information on the sulphur-and-alum gut-bleaching process.

74/1. *Mic*.—Brown's "Manual of Assaying Gold, Silver, Copper, and Lead Ores" (Heinemann, 7s. 6d.) is the most recent small volume. Another is "A Manual of Assaying," by A. S. Miller. (Chapman & Hall.)

85/26. *Pierate*.—(1) Liq. Calcis Hydrosulph.—Boil 16½ oz. of slaked lime and 25 oz. of sulphur in 1 gal. of water for half an hour, and filter 100 oz. It does not keep because it absorbs oxygen, and spirit does not prevent this. (2) Books which give a complete list of the plants of Brazil and Bolivia:—V. Martius's "Flora Brasiliensis," Parts I.-CXVI. (25m, Fleischer, Leipzig); Pohl's "Plantarum Brasiliæ Icones," 2 vols., 137s. (Vienna, 1827-31). (3) The substances which you name are harmless constituents of complexion-lotions in proper circumstances. You will find a good deal of information on the subject in our "Pharmaceutical Formulas." (4) There is no wholesale house in Brazil dealing in rare plants. It is not many years since Messrs. Parke, Davis & Co. sent an exploring party of their own to Brazil with the object of collecting. Perhaps that firm may be able to assist you.

19/50. *Lily*.—Perfuming Dancing-room.—Half an hour before the room is to be used spray a good quantity of the perfume in the room by means of a cheap mouth-spray. Sprinkle an ounce or two at each of the entrances. If a floor-powder is used perfume it before distribution. It is a mistake to use a delicate perfume.

15/43. *Nigra*.—A recipe for paste blacking was given in the Summer number, page 219.

5/17. *A. W. N.*—Can you give us fuller particulars about the article? We cannot trace it.

18/22. *A. G.*—Cheap Cough-mixture.—See *C. & D.*, January 13, 1900, page 73.

5/35. *Du Nova*.—(1) A recipe for Glycerin and Cucumber was last given in the *C. & D.*, October 21, 1899, page 684. (2) We know of no book on window-ticket writing.

5/43. *Hydrarg.* finds *Lotio Nigra*, B.P., 1898, on keeping goes lumpy, and asks how it can be prevented. The tragacanth added at the suggestion of a hospital dispenser is, no doubt, the cause of the evil. Will some readers give their experiences of the keeping-qualities of the lotion?

13/16. *Inquirer*.—The epilepsy-mixture which you mention contains a bromide.

12/51. *F. E. W.*—Locatelli's Balsam (for coughs):—

Olive oil	...	...	...	16 oz.
Turpentine	...	...	...	8 oz.
Yellow wax	...	...	...	8 oz.
Red sanders	...	...	...	1 oz.

Melt the wax with part of the oil. Mix the sanders with the rest of the oil in a mortar and add the wax-solution and the turpentine. Stir till cold.

7/31. *Delta*.—Gingerbread worm-nuts made of calomel ginger, treacle, and flour, must darken in the baking—white gingerbread is not made with treacle.

2/37. *Linseed*.—The linseed-and-aniseed balsam given in "Pharmaceutical Formulas," page 560, is a good and up-to-date formula.

1/63. *W. A. R.*—Vaporising-liquid for whooping-cough.—This is made from the "creosote oil" produced from blast-furnaces, but cannot be successfully imitated.

2/14. *E. P. S.*—Eucalyptus Oil is prepared by distilling the leaves of the various eucalyptus-plants. In Australia this is done on a large scale. We know of no book devoted to the production of eucalyptus oil, but there are pamphlets by Bancroft and Von Mueller from which details could be gathered.

3/28. *G. E. B.*—Etching Metals.—In the case of copper plates for printing, this is done with an etching-liquid composed of hydrochloric acid 10 parts, potassium chlorate 2 parts, water 88 parts, or (in the case of half-tone engravings) with solution of ferric chloride. The plate is covered with a solution of beeswax in turpentine, to which black varnish has been added, and fine needles used to etch and to penetrate the covering.

8/45. *W. P.*—Destroying Trees by chemical means.—If the stem of a tree is bored downwards in several directions, and the holes filled with sulphuric acid, the death of the tree almost certainly follows.

6/63. *W. H. H.*—We believe you are referring to oxidised linseed oil, such as is used in linoleum manufacture. It is made by dripping oil down a sheet of canvas in a current of air, or more quickly by passing ozone through linseed oil. The former process is practised on a very large scale in linoleum-works.

21/74. *Savin*.—Arsenical weed-killers are the best for preventing grass growing on garden-walks. Several kinds of weed-killer are advertised in THE CHEMISTS' AND DRUGGISTS' DIARY.

21/22. *Amateur*.—Joining-Paste.—We have no formula for this. The basis of the article is flour, tinted with carmine, which is perfumed, and made into a stiff paste with glycerin of tragacanth.

255/65. *C. P. T.*—Preparing Arecoline.—Jahns, who investigated the alkaloids of areca-nut, used two processes: (1) Extract the powdered seeds three times, with water to which 2 grammes of sulphuric acid are added for every kilo. of seed. The liquid is concentrated, filtered, and precipitated with potassium-bismuth iodide and sulphuric acid. The red precipitate thus produced is decomposed by boiling with barium carbonate and water. To the filtrate, which is concentrated by evaporation, baryta solution is added, and the arecoline extracted with ether. (2) Exhaust the powdered seeds with cold milk of lime, filter, neutralise with sulphuric acid, evaporate to a syrupy consistence and shake out with ether. Arecoline is the most active constituent of areca-nut, so that the residue would not be of medicinal value after it had been extracted. Arecoline has been used as a myotic and as a tapeworm-remedy in doses of 4 to 6 milligrammes.

259/18. *Rhei*.—Chewing-gum.—We last gave a formula for this in the *C. & D.*, July 31, 1897, page 219, but we cannot say if it is like the brand you mention.

17/10. *Ilector*.—It is not easy to say what the sheets of mica are stuck together with, but our examination points to gelatin dissolved in acetic acid.

### Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

1/1. Address of makers of Craprost tooth-paste.

27/37. Name and address of proprietors of Bolivian cocaine.

26/3. Addresses of manufacturers of gelatine pill-coating machines.

29/70. English agents for Cailler's Swiss milk chocolate, Vevey, Switzerland.

25/27. Makers of "Calesco copier," similar to the "Nec-Cyclostyle," but not requiring the "Wheel Pen."



## Trade Report.

**NOTICE TO BUYERS.**—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: January 3.

THE markets are still under the influence of the holiday feeling, business being chiefly confined to retail quantities, so that there are few alterations. There has been a slight movement in cascara sagrada, and spot prices have advanced about 1s. Higher prices are also asked for oils of lemon, orange, and bergamot by some agents, while others are unchanged. Oil of sweet almond has been reduced 1d., and cod-liver oil is rather lower in view of the end of the season. Orris is cheaper, and so are Persian galls. Terebene is also a shade easier. In quinine no transactions were reported up to Thursday, operators waiting result of the December bark shipments from Java. The changes may be summed up as follows:—

Higher	Lower
Canary-seed	Galls
Cascara sagrada	Gum arabic (Pers.)
Ergot	Oil, almond
Gamboge	Oil, cod-liver
Oil, bergamot	Orris
Oil, lemon	Terebene
Oil, orange	
Pepper	
Petroleum	

### Arrivals.

The following drugs, &c., have arrived at the principal ports of the United Kingdom, from December 27, 1900, to January 2, 1901, both inclusive:—Acetone, 43; aloes, (Aden) 3, (Cape) 50; anise (Russ.), 190, (Chin.) 50; anise oil, star, 20; argol (Cape) 30; arrowroot (@ Halifax) 83; arsenic (@ Oporto) 205; asafetida, 335; bergamot oil, 3; castor oil (E.I.), 803, (Ital.) 10; chillies (@ Madras) 20; cinchona, (@ Bombay) 85, (@ Mollendo) 32, (@ Ceylon) 87; cinnamon-oil, 6; cocoa-butter, 6; cod-liver oil, 92; colocynth, 27; dragon's-blood, 2; drugs, (@ Trieste) 278, (@ Hamburg) 29, (@ Monte Video) 30; fennel-seed, 92; galls (Pers.), 4,093; galangal 67; ganja, 3 cs.; gentian, 36; gum thus, 200; honey (Chil.), 8; juniper berries, 160; lemon oil, 18; lime juice, (@ Halifax) 151 pns.; manna, 7; menthol, 66; nux vomica (@ Madras) 81; oils essential, (@ Sicily) 224, (@ Singapore) 13; olibanum, 37; opium, 2, (Pers.) 20; orris, (@ Bombay) 7, (Ital.) 24; peppermint oil, 6; potash chlorate (Swed.), 120; quicksilver (Ital.), 200; rhubarb, 29; saffron, 1; sandarac, 23; sarsaparilla, 46; saffrafras, 1; senna (Tiny.), 113; sulphur, 500 tons, 292 cks., 1,210 bgs., (brimstone) 401 tons, 1,144 bags, 72 pkgs.; tragacanth, 164; wax, bees', (W.C.A.) 7, (E.I.) 57, (Ital.) 53, (@ Dusseldorf) 72, (Mor.) 16, (Fr.) 14; wax, (@ Pernambuco) 56.

### New York Drug-trade Meeting.

A meeting of the Drug-trade Section of the New York Board of Trade and Transportation was held on December 20. In the absence of Mr. McKesson, Mr. J. H. Stallman presided. He called the attention of those present to the difficulty of importing high-grade asafetida at New York. The prime article, he said, is not now being imported, and the regulations now require that all importations shall be sent for analysis before being passed. The difficulties encountered in importing the prime article would make it exceedingly high priced and very scarce in the near future. Other members asserted that physicians were refusing to prescribe asafetida in prescriptions because the kind frequently used was not of the requisite quality. The matter was eventually referred to a joint committee, with instructions to bring the subject to the attention of the Committee on Revision of the U.S.P., and that they urge a change in the percentage of solubility of asafetida which is now 60 per cent. This percentage is considered too high. Among other subjects considered were regulations governing the storage of drugs and chemicals—a matter that has been receiving much attention since the disas-

trous Tarrant Building fire; the alleged Customs discrimination against Cartagena ipecacuanha; and the manufacture and distribution by the N.Y. Board of Health of antitoxins, vaccines, &c. The statement was made at the meeting, relative to Cartagena ipecacuanha, that there seemed to be a prejudice against the article, notwithstanding the Treasury Department regulations that the article may be imported.

### Cablegrams.

HAMBURG, January 3, 1.30 P.M.:—Refined camphor in second-hands is now selling at 450m. per 100 kilos. Ergot is firm at 500m. per 100 kilos. Hotchkiss oil of peppermint is firmer at 5.60m. per lb. Condurango bark is lower, the latest price being 230m. per 100 kilos.

NEW YORK, January 3, 2.52 P.M.:—Opium is dull of sale at \$3.45 per lb. Quinine, weak at 29c. per oz. Pyrogallic acid is lower at \$2.30 per lb., and salicylic acid is unsettled at 38c. Salol is lower at \$1.45 per lb. Cocaine is easier at \$6.50 per oz. Ipecacuanha is also easier at \$2.60. Jalap firm at 14c. per lb., and senega is weak at 43c. Safflower has advanced to 14c. per lb.

### German Drug Market.

Hamburg, January 1.

Our drug-market is quiet in accordance with the present holiday season.

ANTIMONY is lower, at 35m. per 100 kilos.

CITRIC ACID is offering for 1901 delivery at 290m. per 100 kilos.

CAMPHOR, REFINED, is quiet; spot delivery from second-hand is quoted 445m. per 100 kilos.

CONDURANGO is quiet at 250m. per 100 kilos.

ERGOT shows a better demand; to day Russian is 480m. to 485m. per 100 kilos, paid; now 500m. is asked. Spanish quotes 515m.

LYCOPodium is tending firmer, with an improving demand at 420m. per 100 kilos.

MENTHOL is firm, at 26½m. per kilo.

CORIANDER-SEED is firmer, new crop being held for 27m. per 100 kilos.

FENUGREEK-SEED.—Firm, at 13½ m. per 100 kilos.

SENEGA is a little easier, at 425m. per 100 kilos.

STAR-ANISE.—Spot is quoted 140m. per 100 kilos; the price for shipment is firmer at 65s.

OILS.—Cod-liver is quiet, at 65m. per barrel. Castor oil, firm and scarce on the spot; first-pressing in barrels is quoted 68m. per 100 kilos, and January-February delivery 66m.

ESSENTIAL OILS are practically unchanged.

### Liverpool Drug Market.

Liverpool, January 2.

CASTOR OIL.—Notwithstanding the arrival of 800 cases by the s.s. *Historian*, the market shows a very firm tendency after showing an easier tone on the near approach of the vessel in question. Sales have been made at 3½d. per lb. ex quay, and price has again advanced to 3½d. per lb. for good Calcutta seconds. First-pressure French on the spot is nominally held for 3½d. to 3¾d., but the supplies available are almost *nil*. Second-pressure French is selling at 3½d. For Belgian of second-pressure 3¾d. is asked. For French castor oil to arrive higher rates are now being quoted and paid compared with those of last month.

CHILIAN HONEY is in very narrow compass and pile X. is almost entirely wanting. For pile 1, 27s. to 28s. per cwt. is being paid, while piles 2 and 3 range in value from 23s. 6d. to 25s. 6d. per cwt., as in quality. Stocks at the end of the year were estimated at about 100 cases Californian and 630 barrels Chilian.

COPAIBA.—A small sale of 2 barrels cloudy Maranhham has been made at 1s. 8d. per lb., showing no change.

BEESEWAX (CHILIAN).—The stock is again reduced in proportion and 7½. 15s. per cwt. is being quoted for fair yellow, 7½. 5s. having been paid for grey wax.

CARNAUBA WAX.—Stocks are slowly increasing in spite of pressure to sell, and only small sales of Ceara grey have been made at 55s. per cwt.

CANARY-SEED.—More interest is being manifested in this article, and 400 bags have been sold at 33s. 6d. to 34s. per qr., the latter price being the figure now asked by importers.

GINGER.—African: For the small stocks now available 35s. per cwt. is asked. Cochín: 35s. per cwt. is also asked for this quality, but no transactions have been recorded.

ACACIA.—One hundred and two serons of soft Soudan sorts have found buyers at 66s. per cwt., but most holders are steady at their late quotations, ranging from 62s. 6d. to 73s. per cwt., according to quality.

QUILLAIA is steady at 14½. per ton, though sales in quantity have been made at a shade under this.

GALLS.—Easier, at 65s. per cwt. for Persian blue.



## London Markets.

ACID, CARBOLIC.—Steady at 10½d. to 11d. per lb. for 39° to 40° C. ice-crystals; and 10d. for 34° to 35° C. Crude 60° F. is 2s. 6d., but makers are well sold forward, and are not anxious sellers at this figure.

ALOE.—Quiet. About 80 cases of Curaçao have arrived this week.

ASAFETIDA.—The s.s. *Goolistan*, from Bunder Abbas, has brought 333 cases, part of which will probably be offered at the next auctions. A good demand is expected if quality is satisfactory.

BENZON.—Forty cases of Sumatra, part good and part medium, have arrived, and about 60 cases of Palembang.

CASCARA SAGRADA is higher on the spot, business having been done, principally for the Continent, at from 23s. 6d. to 24s. per cwt. for fresh bark, and more is now asked. To arrive, 22s. c.i.f. is quoted. It is said that freights from San Francisco to London have advanced, and this is the reason given by holders for the apparent advance on the spot. The stock in London is principally in the hands of two holders.

CHLORAL HYDRATE is being excessively cut, as low as 2s. 4d., duty paid, being quoted for 28-lb. jars in one quarter.

CINCHONA.—To the Amsterdam auctions to be held on January 10, 1,170 bales and 27 cases have been added, so that the total amount to be offered on that date is now 7,275 bales and 212 cases, weighing 657,316 kilos. The shipments from Java during December amounted to 1,091,000 Amsterdam lbs.

The exports from British India for six months ended September were:—

	1900	1899	1898
Lbs. ...	1,525,617	1,379,508	818,283

The exports from Holland for the ten months ended October were:—

	1900	1899	1898
Kilos....	4,002,000	4,712,000	4,050,000

COCAINE is unchanged, makers quoting 20s. 9d. for 200-oz. lots, and in second-hands a little is obtainable at 20s., or perhaps a shade under, for favourite brands.

DRAGON'S-BLOOD.—Ten cases of *Reed* and 12 of block (fine and medium) have arrived.

ERGOT.—It is difficult to hear of business, though several parcels are under offer. There are sellers of Russian at 2s. 1½d. per lb., spot, and for Spanish 2s. 5d. is wanted.

GALLS.—Lower. Persian blue have been sold on spot terms at 65s. per cwt., and to arrive at 52s. c.i.f. London. Green and white are slow of sale at 60s. and 52s. 6d. spot.

GAMBOGE is dearer owing to scarcity, and a moderate business has been done, including rough unsorted Siam pipe at from 3l. 10s. to 3l. 15s. per cwt. Fine gum is held for 9l. 10s., and for common pickings, which recently sold at 5l. 5s. per cwt., 6l. 10s. is now asked.

GOLDEN SEAL.—Very quiet. For a small spot parcel on the spot, 2s. 5½d. has been accepted.

GUM ARABIC.—Retail sales of so-called Persian insoluble sorts have been made at easier rates. The London stock is large, and further shipments are on the way.

IPECACUANHA.—Quiet and unchanged, at 10s. to 10s. 3d. per lb. for Rio and 6s. 6d. for Cartagena. The London stock has been augmented during the past fortnight by the arrival of 64 bales of Rio and 50 of Cartagena. It now stands at 321 bales and 245 respectively. The bulk, however, is in the hands of one holder, whose endeavour is to maintain present prices.

MENTHOL.—Unchanged, at 13s. per lb., spot, but to arrive the quotation has been reduced to 12s. 6d., c.i.f. There is a direct shipment of 66 cases landing by s.s. *Agamemnon*, but the bulk has been sold on c.i.f. terms.

OIL, ALMOND.—English pressers have reduced their quotations by 1d. per lb., and now quote dulc. at 1s. 11d., and pallid at 2s. 1d.

OIL, ANISE STAR.—Very quiet at 5s. 6d. per lb., spot, or 5s. 9d. to arrive.

OIL, CASSIA.—For 80 to 85 per cent. 3s. 9d. to 4s., spot, is quoted, or 3s. 5d., c.i.f.

OIL, CASTOR.—The tendency is firmer generally. Hull make is quoted, for February delivery, 33l. per ton for firsts and 32l. for seconds. March 32l. and 31l., April 31l. and 30l., May to August 29l. 10s. and 28l. 10s. respectively, barrels included, ex wharf London. Belgian is firm at 28s. 10s. for first pressing, January-June delivery, second-pressing, spot, 32l.

OIL, COD-LIVER.—Under the influence of the new fishing which will commence in a few weeks, the holders of cod-liver oil in Norway show a still greater desire to realise. The last transactions in finest non-congealing Lofoten oil were at from 60s. to 61s. per barrel, f.o.b. Bergen. The exports from Bergen up to date were 10,994 barrels, as against 14,185 barrels at the same time last year.

OIL, LEMONGRASS, is still very scarce on the spot at 4½d. per oz., while to arrive 4½d., c.i.f., is quoted.

OIL, MANDARIN.—For genuine, 21s. per lb. f.o.b. Messina, is asked.

OIL, ORRIS (CONCRETE) has been reduced to 21s. per oz. by makers.

OIL, PEPPERMINT.—Quiet, with sellers of American HGH at 5s. 9d. per lb., spot.

OPIUM.—The London market is quiet and unchanged, practically no business having been done in Turkey gum. Good to fine Persian is quoted 14s. to 14s. 6d. per lb. Sales to arrive have been made at 14s., at which figure there are still buyers but no sellers.

SMYRNA, December 21.—The sales for the week amount to 38 cases, including 27 tale quale Yerli at 10s. 1d., 8 cases choice Yerli at 10s. 3d., and 3 cases inspected ditto at 11s. c.i.f. Twenty-five cases of the above were for America, and the remainder for England and the Continent. Unfavourable reports continue to be received from the interior, and prospects for the winter sowings are not encouraging, frost and snow having set in.

CONSTANTINOPLE, December 28.—The past week has been exceptionally quiet, and the only sales to report are three cases "Druggists," at 9s. 5d. per lb., f.o.b. Market keeps quietly steady. Speculators are again on the alert, owing to reports of severe frost from the interior, which, should it continue, will damage the young plants considerably.

ORRIS.—Quotations from Messina to hand this week quote selected Florentine at 37s. 6d. c.i.f., sorts at 33s., and small white 31s. 6d.

QUININE has been a dead letter on this market, and not a single transaction has been reported; prices are, therefore, nominal. The nearest spot price is 1s. 1½d., with sellers of March at 1s. 1d. and May at 1s. 1½d. At the auction of quinine held in Batavia on December 28, 3,900 kilos Ed. II. were sold at the equivalent of 19l. per kilo (against 22l. paid at the November auctions), while Ed. III. was bought in. The next auction will be held on January 16.

SAFFRON.—The Spanish market keeps very firm, but without change; 31s. per lb. net is quoted by importers.

The exports from Spain for the ten months ended October have been:—

	1900	1899	1898
Kilos. ...	58,704	43,175	111,406

SARSAPARILLA.—About 60 bales of grey Jamaica and 11 packages of native Jamaica have arrived this week.

SEEDS have been quiet generally, but there is a firmer market for *Canary*, and it is difficult to buy Turkish under 34s. 6d. per quarter. *Cumin* is in fair demand, and the supply being very small, prices are maintained, 28s. per cwt. is the quotation for Mogador, and 36s. for Malta. *Caraways* quiet at 34s. per cwt. for Dutch. *Coriander* steady at 12s. per cwt. for old crop Morocco, and 13s. 6d. for new. *Fennugreek* slow of sale, but the market shows a firmer tendency owing to the exhaustion of supplies in Morocco.

SHELLAC.—Very quiet, with small sales at steady rates. For December-February shipment the business done includes 100 cases TN at 59s., c.i.f.

Messrs. Reynolds & Sellers, in their annual report, state that the year just closed compares favourably with the previous one, transactions being on a more extensive scale than in 1899; several attempts were made on the part of operators to restore the article to the speculative position it occupied for so many years, which



imparted a little excitement at the time, and gave holders an opportunity of realising their parcels at a small turnover while the buying lasted, any cessation, however, being taken advantage of by the "bears," who invariably appeared on the slightest indication that purchasing was slackening a little, thereby frustrating anything like a rush upward. The fluctuations in prices have not been of any wide extent, spot quotations not moving more than 3s. either way, and "forward delivery" not more than 5s.; in some instances the latter position has been within 1s. of the prices paid for spot parcels, TN in diamond throughout the year being in the neighbourhood of 59s. to 62s. The finer qualities of orange have not been so much in demand as heretofore, the superior TN character being in many instances substituted. The grand total shipments from Calcutta to all ports, for the season November to October, prove a record, being 156,442 cases, America and the Continent taking the surplus, the former country patronising orange qualities, and the latter garnet, 12,198 cases of which being imported to the Continent, against 3,479 cases to the United Kingdom.

**SPICES.**—Although no public sales have been held during the past fortnight a fair business has been done privately; but more especially in the speculative markets and for export, the home trade being disinclined to buy at this time of year. *Cochin Ginger* is firm, 32s. to 33s. per cwt. being now the quotation for washed rough. *Zanzibar Cloves* have been steady, and are now rather dearer, 41<sup>3</sup>/<sub>4</sub>d. per lb. being paid on Wednesday for March-May delivery. *Pepper* has improved in price, Singapore black is worth 6<sup>5</sup>/<sub>16</sub>d. per lb. on the spot, and sellers are asking 6<sup>1</sup>/<sub>16</sub>d. per lb. for March-May shipment. *Tellicherry* is selling at 6<sup>5</sup>/<sub>16</sub>d. per lb. for fair quality, but more money is wanted for fine. *White* is also dearer, Singapore has sold at 9<sup>1</sup>/<sub>4</sub>d. per lb. on the spot, and at 9<sup>3</sup>/<sub>4</sub>d. for future shipment. Penang has been in request for arrival and 8<sup>3</sup>/<sub>16</sub>d. has been paid.

**STROPHANTHUS** is quoted 3s. 9d. per lb. for green Kombé seed in quantity.

**TEREBENE.**—Pure has been reduced to 1s. 2d. for small wholesale quantities.

**TRAGACANTH.**—Very high prices are now asked by importers of Persian gum, and business has been restricted in consequence. The lower qualities of Bagdad have been in fair demand, but fine quality is still wanted.

### Heavy Chemicals in 1900.

The year opened with a good all-round demand, both on home and export account, stocks low, and values very firm. and so the market has ruled all along. The fuel question during the full period was most troublesome to manufacturers, and some works have actually been closed down, owing to high costs and the difficulty of obtaining supplies. Hence the values of the finished products have been affected. During the first five months of the year exports of alkali and bleaching-materials stood very well, there being very substantial increases in both quantities and values as compared with last year. During the later months decreases have taken place, but in spite of this 1900 stands better than 1899.

The year has been productive of many important changes, and as in the case of last year there have been various big amalgamations and also special arrangements *re* selling-prices. Amongst chemical-manufacturers there have been two of special interest and importance—the first, the taking over of Messrs. Bowman, Thompson & Co.'s works by Messrs. Brunner, Mond & Co., an arrangement which was fully completed in August. Then came that of the Aluminium Company (Limited), of Oldbury, with the Castner-Kellner Alkali Company (Limited), with works at Runcorn. Eleven firms of manufacturing chemists and drysalters have combined under the title of the Yorkshire Dyewares and Chemical Company (Limited). Combinations have taken place between the various makers of alizarine, and also between the Chilean nitrate companies. Agreements have been entered into by the principal English and continental manufacturers with reference to the selling-price of bleaching-powder, and also regarding the position of caustic soda.

As showing the difficulties under which the chemical-trade labours and the very keen competition which exists, necessitating the centralisation of manufacturers as much as ever possible, the fact may be mentioned that the United Alkali Company have decided to discontinue the manufacture of alkali and soda ash on the Tyne at the close of the year. In

the centre referred to, bleaching-powder, caustic soda, soda crystals, and sulphate of soda will then remain as the staple articles of production. Caustic soda has been in heavy demand throughout the year, and generally very scarce. Prices at the commencement of the year were 8l. to 8l. 5s. per ton for 60 per cent. An advance of 10s. per ton took place in January, and another of 10s. in February. After this supplies were rather better, and a slightly easier tendency resulted, but this only lasted a short time. To-day's prices are:—60 per cent., 9l. 5s. per ton; 70 per cent., 10l. 5s. per ton; and 76 per cent., 11l. 5s. per ton. Bleaching-powder also commenced with a firm tone, and was in good demand at 6l. per ton for softwood casks on rails. An early advance of 20s. per ton took place. In May, June, and July the tone became somewhat easier, and prices declined about 10s. per ton, ultimately declining to 6l. per ton. In September, however, price for forward delivery went up again to 6l. 17s. 6d. to 7l. per ton, and at this it still remains. Ammonia alkali has kept steady, and without any great change in price—commencing at 4l. 7s. 6d. to 4l. 12s. 6d. per ton in bags free on rails, becoming later on somewhat easier, and afterwards recovering again. Then manufacturers fixed prices for 1901 at 4l. 12s. 6d. to 4l. 17s. 6d., and at this it still continues. Soda crystals, soda ash, and bicarbonate of soda have moved fairly freely all along; the two former stand about 5s. per ton higher, whilst the latter stands practically unchanged. Saltcake began the year at 27s. 6d. per ton, free on rails in bulk, afterwards declining by stages to 22s., advancing later in a similar manner, and reaching 26s. to 28s. 6d. per ton, with 30s. as the figure for forward delivery. Chlorates of potash and soda have been changeable. Beginning very firm, and in short supply, price by end of February had advanced by 1d. per lb. Easier tendency followed in June and August, but on the year they stand fairly steady at about <sup>1</sup>/<sub>2</sub>d. per lb. advance. Borax has held a strong position all through, and an early advance of 10s. per ton has been well maintained. Sulphate of copper began with very easy tone, and early declined by about 20s. per ton, but recovered owing to firmer tone of the metal, and is now very steady. Sal ammoniac has been in steady inquiry without change in rates. Zinc, magnesium, and lead salts have met with fairly constant demand and have not fluctuated much in value. Demand for alumina products has been good, and prices have ruled firm owing to higher cost of production; values now are from 5s. to 10s. per ton higher than at the commencement of the year. Barium products, too, have maintained a very firm tendency, partly on account of good demand, but more particularly owing to scarcity and advances in value of the main raw material, the mineral carbonate. Higher values are likely to rule this year. Bichromates of potash and soda began fairly firm in tone, but have suffered owing to continental competition, and, roughly speaking, are about <sup>1</sup>/<sub>2</sub>d. per lb. lower. The demand for white powdered arsenic has, on the whole, been good. The article increased in value early in the year, but is now about 10s. per ton lower than in January. The coal-tar products market, although dull during certain periods, has, on the whole, maintained a very steady tone, and good business has been done. Sulphate of ammonia began the year well with strong advances, but is now at about the same values as at the commencement, but with fairly steady tone.

THE Russian Government has decided to appoint a Consul at Bushire without delay, to establish, from next March, a regular line of Russian steamers from Odessa to the Persian Gulf, and to encourage Russian trade openly and actively in Southern Persia.

THE LATE DR. E. R. SQUIBB, of Brooklyn, N.Y., has left a fortune of \$1,000,000 divisible between his sons, Messrs. E. H. and C. F. Squibb.

AT Richmond on Thursday, Natalis Salvator Palomlie, described as a chemist, of Loring Road, Isleworth, was remanded, charged with supplying drugs for an unlawful purpose.

LIEBIG'S EXTRACT OF MEAT COMPANY (LIMITED) have declared a half-yearly interim dividend of 5 per cent. on the ordinary shares, being 20s. per share, free of income-tax, payable on and after February 15 next to the proprietors of ordinary shares registered on the company's books on February 8, and to holders of ordinary share warrants to bearer.



## London Drug Statistics.

THE following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses from January 1 to December 31, 1900, and to the stocks on December 31.

	December		Stocks		1900	
	Landed	Delivd.	1900	1899	Imptrd.	Delivrd.
Aloes ..... cs &c.	87	152	3,056	2,664	2,658	2,266
..... gouris	—	—	1,034	—	4,048	3,014
Anise, star ..... cs	—	2	48	55	—	8
Balsams ..... csks &c.	152	79	495	424	1,639	1,568
Calumba ..... bgs	2	124	906	225	2,541	1,860
Camphor ..... pkgs	481	526	3,837	1,779	9,260	7,204
Cardamoms ..... cs &c.	241	313	2,194	1,710	5,092	4,607
Cinchona ..... pkgs	1,367	812	9,621	16,099	21,749	28,227
Oubeba ..... bgs	257	—	1,548	1,44	769	965
Dragon's-blood ..... cs	27	17	147	125	210	188
Galls ..... pkgs	1,497	451	2,359	2,699	6,484	5,547
Gums—						
Ammoniacum ..	1	2	68	71	43	43
Animi & copal ..	3,825	2,549	10,774	10,623	35,192	35,059
Arabic ..... cs	2,835	2,665	17,757	11,672	27,171	21,156
Asafetida ..	—	88	379	703	766	1,090
Benzoin ..... cs	285	283	1,035	930	3,092	2,987
Damar ..... cs	860	258	4,562	4,291	4,572	4,353
Galbanum ..	—	2	12	—	—	—
Gamboge ..... cs	3	10	214	398	70	164
Gualacum ..	—	4	39	54	68	83
Kauri ..... tons	228	220	1,933	1,650	3,132	2,843
Kino ..... pkgs	1	30	23	45	85	99
Mastic ..... cs	—	—	6	6	—	25
Myrrh, E. I. ..	—	2	178	310	148	280
Olibanum ..	42	498	1,448	1,699	6,099	6,331
Sandarac ....	285	51	592	411	1,199	967
Tragacanth ..	1,093	1,145	3,543	1,036	11,326	8,819
Ipecacuanha, Rio bis	69	43	311	202	881	772
..... other kinds pkgs	33	15	224	116	546	436
Jalap ..... bis	2	4	331	310	161	140
Nux vomica ..... pkgs	47	826	1,583	13	3,694	2,224
Oils—						
*Anise ..... cs	—	2	173	187	138	151
*Cassia ..... cs	—	5	115	74	86	45
Castor ..... pkgs	65	138	532	966	1,997	2,458
Coccol-nut ..... tons	135	130	146	292	1,319	1,493
Olive ..... csks, &c.	92	87	493	1,037	1,620	2,156
Palm ..... tons	6	3	6	6	40	41
†Quinine sulph. .... lbs	1,999	6,275	209,782	174,566	98,430	63,213
Rhubarb ..... chts	43	77	1,189	1,390	1,103	1,214
Sarsaparilla ..... pkgs	35	51	153	297	965	900
Senna ..... bis &c.	836	454	2,528	1,630	7,646	6,796
Shellac ..... cs	4,050	3,141	36,718	41,599	41,779	46,660
Turmeric ..... tons	5	36	465	153	1,144	708
Wax, bees' ..... pkgs	420	1,024	1,394	1,521	6,738	6,879
„ Japan ..... cs	74	48	625	507	835	917

\* Stocks of aniseed and cassia oils lying at Smith's Wharf and Brewer's Quay are not included in this return.

† Includes the quantity at Red Lion, Bull, and Smith's Wharves; also the Docks.

The statistics of goods lying at City Commercial Wharf are not included in above returns.

NOTE.—The distinguishing feature of the statistics is the heavy stock of quinine, which is now well over 3,300,000 oz., and compared with December 31, 1899, it shows an increase of over 560,000 oz. The delivery of 4 bales of jalap does not justify the higher prices talked of, and there is little inducement to lay in stock. The improved demand for kino is evidenced by the fact that 30 packages were delivered last month. The stock of asafetida is low, and so is the quality; an arrival of 300-odd packages is landing. A fair business was done in Rio ipecacuanha in December, but the imports are increasing, and the stock is 109 hales more than last year. The consumption of senna is increasing considerably, as during the past twelve months 7,700 bales have been landed, which figures have not been exceeded at any time during the past eleven years, the average landings for this period being about 5,300 bales per annum. The deliveries for the twelve months ended December have also been greater than at any period during the past eleven years, which shows that consumption is practically on a level with the imports. The stock of shellac shows a reduction of 4,000 cases on the year, and the deliveries a falling-off, but they are counteracted by the decrease in the landings—41,779 cases (1900) against 48,028 (1899), which may be accounted for by the fact that for some time past the trade have been purchasing from hand to mouth only.

JUNIOR PHARMACY BALL.—This annual function is to be held at the Portman Rooms on Wednesday, February 6, 1901. Mr. Ralph L. Cassie, 49 Newgate Street, E.C., is acting as Hon. Secretary.

## Arsenic in Beer.

Mr. A. H. Allen in a communication to the *Chemical News* of last week states that Reinsch's test is practically the only reliable one for the detection of arsenic in beer, and he gives details of the precautions which should be observed in applying the test. Mr. Allen has little faith in Gutzeit's test, which has been relied upon by Mr. Kirkby, Mr. Dowdard and others. In this connection we think we must attribute to Mr. Allen the following nursery rhyme up to date, which we print from the *Chemical Trade Journal*. It is entitled "The Free Mash-Tun":—

This is the poison "Arsenic" named,  
Contained in the "Cuprous Pyrites" famed—  
The name of the ore which came from Spain  
And was made into vitriol all for gain,  
By the thrifty man whose name's suppressed  
But by those "in the know" is easily guessed:  
Who supplied the acid used by the firm,  
Who made the stuff they "glucose" term,  
And brewing sugars of fanciful names,  
Made from the starch of various grains;  
Supplied with a warrant of purity clear  
To those who wanted to brew cheap beer;  
Containing such liquor was free from fault  
And better by far than if made from malt.  
So they sold this beer, correct by law  
Passed in their favour by strength of jaw,  
To the beerhouse-keeper, who filled a pot  
For the Lancashire workman tired and hot,  
Who after a time into hospital went  
And died with a curse on the Government,  
And the brewers who Gladstone's Act abused  
And left the wholesome malt unused,  
To rot in the kiln that Jack built.

A. H. ALLEN.

## Coming Events.

### Sunday, January 6.

Chapel Royal, St. James's Palace, at 12 noon. Annual offering of gold, frankincense, and myrrh on behalf of the Queen.

### Monday, January 7.

*Society of Chemical Industry* (London Section), Burlington W. House, Piccadilly, W., at 8 P.M. Mr. O. Guttman on the "Early Manufacture of Sulphuric and Nitric Acids," and Mr. W. Cullen on the "Heat-test for Explosives."

### Tuesday, January 8.

*Royal Institution of Great Britain*, Albemarle Street, Piccadilly, W., at 3 P.M. Closing lecture of Sir Robert Ball's Christmas lectures on "Great Chapters from the Book of Nature."

### Wednesday, January 9.

*Sheffield Pharmaceutical and Chemical Society*, at 8.30 P.M. Paper by Mr. J. B. Pater.

*Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association*. Conversation.

*Nottingham and Notts Chemists' Association*. Lantern-lecture by Mr. A. E. Bailby on "English Cathedrals."

*Manchester Pharmaceutical Association*, Victoria Hotel, Manchester, at 7.30 P.M. Dr. W. A. Bone and Dr. H. C. Carpenter will give a paper on "Fermentation," illustrated with lantern and microscope.

*Newcastle-on-Tyne and District Chemists' Association*, Hôtel Métropole, Newcastle-on-Tyne, at 8.30 P.M. Discussion on the "Draft Pharmacy Bill."

### Thursday, January 10.

*North Staffordshire and District Chemists' Association*, Roebuck Hotel, Stoke, at 6.45 P.M. Discussion on the "Draft Pharmacy Bill."

*Chemists' Assistants' Union*. Smoking-concert at the Horse Shoe Hotel, Tottenham Court Road, at 8.30 P.M., Mr. A. H. Solomon in the chair.

THE "Allenbury's" Cricket Club will hold a Bohemian concert at the London Tavern, Mark Lane, E.C., on January 14. Tickets, 1s. each, may be had from the Secretary, care of Messrs. Allen & Hauburys (Limited), Bethnal Green.

THE Committee of the Royal Victoria Hall, Waterloo Road, S.E., have arranged a new series of Peany Science Lectures. They include Mr. F. Womack on the "Solar System" (January 8); Professor Seeley on the "Sea Coasts of Britain" (January 15); Mr. A. W. Porter on "Waves and Oscillations" (January 22) and Professor Capper on "Niagara Water-power Installation."





# IRISH SUPPLEMENT TO THE CHEMIST AND DRUGGIST

FIFTH YEAR.

SATURDAY, JANUARY 5, 1901.

No. 49.

## Review of the Year.

PERHAPS the most debated question in pharmaceutical politics during the year has been

### COMPANY-PHARMACY.

When 1899 closed, the Pharmacy Bill, which contained clauses drafted by the Lord Chancellor for regulating company-pharmacy, and which Bill was strenuously opposed by chemists, had just been abandoned through the prorogation of Parliament. On February 12, however, the objectionable clauses reappeared in the Companies Bill introduced into the House of Commons by Mr. Ritchie, President of the Board of Trade. The Pharmaceutical Society of Ireland displayed considerable activity in interviewing the Presidents of the Royal Colleges of Physicians and Surgeons, and the members of Parliament for Dublin city, obtaining promise of active support from them and Irish M.P.s generally. The second reading came on on June 26, when the Bill was referred to the Grand Committee on Trade; and when the report stage came on, on July 24, the clauses relating to company-pharmacy were dropped. This result was due chiefly to the persistent lobbying of the President of the Pharmaceutical Society of Ireland (Mr. G. D. Beggs), who got promises from several members that they would block the Bill if the clauses were not withdrawn. The British Society at the end of the year drew up a draft Pharmacy Bill in which the subject is dealt with.

### PHARMACEUTICAL ADMINISTRATION

First, we may recall the appointment of Mr. G. D. Beggs as President of the Pharmaceutical Society, in succession to Mr. R. J. Downes, who retired owing to feeble health and died three months later. Mr. J. I. Bernard succeeded Mr. Beggs as Vice-President, and under them the Society continues to discharge its duties efficiently, while it looks after the reputation of its members in quite a paternal way. For example, early in the year a medical journal which circulates rather freely in Ireland aspersed the character of pharmacists by saying that they could not compound fractions of a grain into pills or tablets. The Council made the journal climb down. The evening meetings of the Society were also good in the matter of fare provided, but the attendances were small. In May Mr. James Michie resigned his seat on the Council, and was appointed an examiner, Dr. Meredith Whitla succeeding him as councillor. At the

same Council meeting Mr. Turkington questioned if it was legal to prevent candidates for the Registered Druggist examination entering until 21, whereupon the Council drew up a regulation, which Dublin Castle approved. On the occasion of the Queen's visit to Ireland she was received, at Kingstown by Mr. T. W. Robinson, a pharmacist and ex-councillor, who later received a knighthood. Mr. George Brown was elected to the Council in place of Mr. Downes, and at the annual meeting in October Messrs. Thomas N. Moffitt and Thomas Butt took the places of Messrs. Ryan and Walsh. At this meeting the President reported that there were on the registers 610 pharmaceutical chemists, 289 chemists and druggists, and 478 registered druggists. In the course of the year 57 passed the Preliminary examination and 11 were registered on the basis of other examinations, 7 passed the Pharmaceutical Assistants' examination, 31 that for registered druggists, and 24 passed the Licence examination. These figures are all ahead of the previous year. This annual meeting was quite a piquant affair, in consequence of Dr. McWalter suggesting that political and ecclesiastical connections had an influence upon the election of Councillors. In November the Council appointed Mr. Guiler, of Belfast, as an examiner but there was a bit of a squabble over it. During the year the Council has enforced the Pharmacy Acts by numerous cases in court, the most important being in respect to compounding by druggists; in one such case, at Tullamore, seven summonses were taken out, and fines of 20*l.* and costs inflicted in respect to four. Such cases as these bring into relief the real evil of two grades of qualification in pharmacy; the environment of the two is the same, but the powers different, and there is a constant temptation for the lower grade to exercise the functions of the higher. As a matter of fact, this is the greatest evil which the Irish Executive has to deal with, and the day may not be far distant when an appeal has to be made to Parliament for the amalgamation of the grades.

### THE BRITISH PHARMACEUTICAL CONFERENCE

Met in London in July, and was attended by delegates from the Pharmaceutical Society of Ireland and the Chemists' and Druggists' Society of Ireland. The meeting was favoured with quite exceptional weather, and is looked upon as one of the most successful in the history of the Conference. The 1901 meeting is to be in Dublin, and an energetic committee is working at the arrangements in a way which promises another record meeting.



## British Pharmaceutical Conference.

A MEETING in connection with the above was held at the Pharmaceutical Society's rooms, 67 Lower Mount Street, Dublin, on December 14, Mr. G. D. Beggs in the chair. The following were present:—Messrs. J. I. Bernard, H. Conyngham, W. F. Wells, W. V. Johnston, T. J. English, J. S. Ash, J. Michie, J. Smith, P. Kelly, H. C. Grimes, P. A. V. Peacocke, D. Middleton, H. Simpson, Professor C. R. C. Tichborne, and Dr. McWalter.

Mr. Bernard, Hon. Secretary *pro tem.*, read the minutes of the previous meeting, which, after some slight amendment, were signed. Apologies for non-attendance were received from Messrs. P. N. White, Sligo; D. O'Sullivan, Rathmines; J. A. Ray, Nassau Street; W. Laird, Upper Sackville Street; G. Brown, Wexford Street; J. T. Turner, Upper Sackville Street; S. P. Boyd, M.A., Bride Street; J. Brittain, Drogheda; and Dr. Walsh, Westmoreland Street, Dublin. All these gentlemen expressed their deep interest in the success of the Conference, and most of them enclosed subscriptions.

### ELECTION OF OFFICERS.

The Acting Chairman said the chief business was to elect office-bearers. The first officer they had to choose was a Chairman.

Mr. Kelly proposed Mr. W. F. Wells for the position. There was a great deal of work to be done, and the Chairman required to know a lot about Conference work. Mr. Wells was thoroughly conversant with all details, and a better Chairman could not be found.

Mr. English seconded the motion, which was put, and carried *nem. con.*

Mr. Wells, in taking the chair, thanked the members for electing him as their Chairman. It was twenty-two years since the Conference was held in Dublin. He had every reason to believe that the 1901 Conference would be no less a success than its predecessors. (Applause.)

Mr. Beggs proposed Mr. Bernard as Local Hon. Secretary. Mr. Bernard was a man of energy, and anything he promised to do was as good as done. (Hear, hear.)

Professor Tichborne seconded the motion, which was carried.

Mr. Bernard replied, and pledged himself to leave nothing undone to make the Dublin Conference all that was desired.

On the motion of Mr. Conyngham, seconded by Mr. Smith, Mr. Beggs was elected Hon. Treasurer.

Mr. Beggs, in responding, said he had intended to propose his friend Mr. Conyngham for the post, but that gentleman happened to first "catch the speaker's eye." (Laughter.)

On the motion of Mr. Beggs, seconded by Mr. Simpson, Mr. S. Parker Boyd, M.A., was elected Vice-Chairman of the Committee.

Mr. Wells said the selection was a fit and proper one.

The following were then elected as a working committee, with power to add to their number:—Messrs. Walsh, Kelly, Conyngham, Beggs, White, Ash, Michie, Simpson, Boyd, Golden, Peacocke, Grimes, Brown, Smith, Johnston, English, Middleton, Professor Tichborne, Sir Thomas W. Robinson, and the Chairman and Hon. Secretary *ex officio*.

Mr. Bernard said they were anxious to see the committee as representative as possible. They wanted sub-committees to see after the reception, amusement, and catering, and these would be formed out of the working committee.

The Chairman thought all subscribers should be on the general committee.

This was agreed to.

The Hon. Treasurer, in reply to a question, said the subscriptions promised and received up to the present amounted to about 200%. They would want from 250% to 300%. If the full amount of subscriptions was not expended, the overplus would be returned to the subscribers *pro rata*.

The Chairman explained the necessity of getting in the subscriptions early. An account would be opened at the bank in the name of himself and the Treasurer. He compared the expenditure in other centres where the Conferences had been held with that estimated for Dublin. They had already two subscribers north of the Boyne, but while it had been agreed not to look for subscriptions north of Drogheda, they would not refuse any money that might come from afar.

### THE PROGRAMME.

As regarded the proposed *rendezvous*, Mr. Wells said negotiations were being made with the local authorities in the matter, and he hoped to have an answer in due time. He suggested securing the co-operation of the leading Dublin medical men. He had reason to believe there would be no difficulty in getting the best accommodation for the Conference. Details were then gone into, and it was suggested provisionally, and subject to the approval of the committee in London, that the Conference be held the first week in August; that the reception of delegates be held on Monday evening; that a visit be subsequently paid to Bray, a charming seaside resort in the county Wicklow, thence the same evening to Dalkey, where a garden-party with military band would be held; drive through Phoenix Park in drags to Lucan, and home *via* Tallaght, an historic locality and replete with reminiscences of the Irish rebellion; electric traction to Howth, the Hibernian Margate; a visit to the famous Glendalough and "Devil's Glen"; luncheons, dinners, and teas *en suite*; and at the close of the Conference on Friday, a three days' or shorter sojourn at Killarney to those desirous of prolonging their stay in Ireland. A ladies' committee was authorised to be formed, and Mr. Bernard kindly undertook to see after its formation in due time. Dr. McWalter's suggestion that an alternative amusement programme be made out in the event of wet weather was noted. It is, of course, understood that the festivities would not interfere with the serious work of the Conference. The smoking-concert and ladies' dance on Wednesday are looked forward to with pleasant anticipation, as are also the projected visits to the chief places of interest in the city, including Guinness's brewery, Jacob's biscuit-works, the distilleries, Dublin Castle, and the old Parliament House on College Green. It was agreed to interview Mr. Crossley, of the Irish Tourists' Association, in regard to the outings. The next meeting was arranged to be held the first week in January. Mr. Conyngham's vote of thanks to the Chairman terminated the proceedings.

A MEETING of the Executive Committee was held at 16 Bloomsbury Square, W.C., on December 13. There were present Mr. G. C. Druce (President) in the chair, Dr. Attfield and Mr. E. M. Holmes (Vice-Presidents), Professor Greenish, Messrs. Atkinson, Bird, Collier, and Warren, Mr. J. C. Umney (Treasurer), Messrs. Naylor and Ransom (Hon. General Secretaries), and Mr. Hearn (Assistant Secretary).

### THE RESEARCH-WORKER.

Mr. Ransom reported that the sub-committee appointed by the Executive had met the representatives delegated by the Council of the Pharmaceutical Society of Great Britain, and discussed with them the possibility of the proposed research-worker being permitted to carry on his work in the research-laboratories of the Society for the three years for which subscriptions had been promised. The representatives of the Council expressed the decided opinion that no worker appointed by the Conference could be admitted into the laboratories, and that the fund promised for research-work could only be accepted by the Council free from all conditions as to the selection of the worker and of the work to be carried out.

After some discussion, the following resolution, proposed by Mr. J. C. Umney, and seconded by Dr. Attfield, was carried unanimously:—

That the individuals, firms, and companies who have promised financial support to a scheme for the appointment of a British Pharmaceutical Conference Research-worker shall be invited to give the sum of money promised, for one year at least, to a fund to be established and known as the British Pharmaceutical Conference Research Fund, such fund to be under the control of the Executive Committee of the Conference, which shall be empowered to make adequate grants to workers, either to defray expenses of material or as a payment for time occupied in the research, as such Committee may think fit.

### THE "YEAR-BOOK" AND THE "FORMULARY."

Mr. Naylor read a letter from Mr. Louis Siebold resigning his position as Editor of the *Year-book* on account of ill-health.

Seven gentlemen were elected to membership.



## Letters to the Editor.

### The Physician as Hippocrates and the Pharmacist as Helot.

SIR,—If any of your readers insist that the Greek for horse-doctor is *hippoiatrios*, I shall not contest the point. My desire is to point out how the President of the Irish College of Physicians is also playing the part of President to our new Veterinary College, and the bearing of such a dual post in the interests of pharmacists, not only here, but in Great Britain.

The gentleman who holds the unique honour is Sir Christopher Nixon, and for the first time in the history of the world a man is found to parade himself as a physician and a horse-doctor, for surely the presidency of a Royal Veterinary College connotes the latter distinction. In the current number of the *British Medical Journal* Sir Christopher's titles are faithfully set forth at the heading of a somewhat remarkable article, wherein he suggests, *inter alia*, that the reliance which a man places on drugs bears a ratio to his mental weakness. Now, we will not stop to consider how it can be deemed honest for a physician to charge a patient a guinea for a prescription without making it clear to him that not only would the drugs be useless, but that to think the contrary was a mark of imbecility, when a pharmacist may be fined for selling a pennyworth of sweet nitre unless he explains to the purchaser that it may possibly not be of the nature, substance, and quality of the remedy he expected for his penny.

But we are not at present concerned in an abstract ethical problem, but one of immediate concrete interest to many pharmacists. There are many districts in Ireland (I believe also in England, and I know in Scotland) where prescriptions are so scarce that a pharmacist cannot live as such. He ekes out an existence in the general drug-trade, and frequently finds a certain degree of veterinary practice an indispensable auxiliary to a livelihood. Hence many chemists greeted with joy the news that a Veterinary College was to be founded, as they hoped thereby to establish themselves as legitimate veterinarians.

Unfortunately, however, the new college has seemingly fallen under the sway of the College of Physicians, and its blighting influence can already be felt, for *nihil tetigit quod non frustravit*. Pharmacists are turned from the doors; their Preliminary examination is refused. The Pharmaceutical Society is overlooked, although it has power to render the operations of the Veterinary College quite nugatory by refusing to allow its members to sell medicines containing poisons.

The Irish Pharmacy Act, it will be recollected, has an express exemption in favour of members of the English and Scotch Veterinary Colleges, who must be allowed to dispense their own medicines; but the Act is quite strong enough to prevent the most illustrious member who may be armed with the diploma of the new college from dispensing an ounce of laudanum for a colicky cob.

Now, Irish pharmacists, and, I believe, most of the Irish people, are quite willing that a chemist who has such a degree of education as is testified by the Preliminary examination of either Society should have every facility to acquire such a knowledge of the veterinary art as may make him a useful member of an agricultural community, either here or in Great Britain, and to be certified accordingly; but, if the new college is to be an appanage of an exclusive and effete College of Physicians, who will regard it as offering an opportunity for some pathological research, it is hopeless and doomed for any practical good. Its diplomas will be impracticable of attainment, and its operations will be rendered nugatory by the Poisons Act.

Yours truly,

Dublin, December 1.

M.P.S.I. (35/1.)

[Our correspondent is wrong in supposing that the Pharmacy Act does not exempt graduates from the new Irish Veterinary College. Like the students of the English and Scotch Veterinary Colleges, they must for registration pass the examinations of the Royal College of Veterinary Surgeons, whose powers of examining and registering apply to Great Britain and Ireland, and Section 31 of the 1875 Act applies to such licentiates.—EDITOR.]

### An Irish Demonstratorship of Pharmacy.

SIR,—*Ex Hibernia semper aliquid novi*, in no other country on the face of the habitable globe would they have appointed a budding laryngologist when a good practical pharmacist was required to teach that subject in a school of medicine.

The death of Dr. Quinlan left vacant the chair of materia medica and pharmacy in the Cecilia Street School of Medicine, which has now become the chief school in Ireland. It was practically a dual chair, and a popular physician was appointed, on the understanding that he was to have a good practical man to do the pharmacy part of the work.

Now numbers of pharmacists reading for medicine attend this school, and they naturally thought a pharmacist was the proper person to teach pharmacy, and that one of their number should be appointed to the minor post. They came to an understanding that a couple of them who seemed the most eligible should apply. These included a gentleman of some ten years' experience as a pharmaceutical chemist who holds the medal for materia medica of the University.

To their surprise the person appointed was a young surgeon, recently qualified, who has set up in Merrion Square as a nose and throat specialist. Nobody denies that this is a clever and deserving young man, but the connection between rhinology and pharmacy is not obvious to the pharmacists. It is well understood that the appointment is more a benevolent attempt of Sir Christopher Nixon, and of some other governors of the school, to encourage a deserving student until something better turns up, but the chemists feel that they must deem themselves cowards for the rest of their lives if they do not make some protest against this prostitution of pharmacy. The affair has another aspect: the Pharmaceutical Society regulates the practice of pharmacy in Ireland; certain medical practitioners are allowed to practise pharmacy if they have been properly examined in that subject, but proper examination connotes proper teaching, and proper teaching a proper teacher. Therefore the Society is in a position to complain to the General Medical Council about the qualifications of persons who profess to teach pharmacy in the medical schools.

Yours truly,

Dublin, December 31.

L.P.S.I.

## Chemists' and Druggists' Society of Ireland.

A SUCCESSFUL musical entertainment was given on December 12 in connection with this Society in St. George's Café, Belfast. The attendance was representative, and so large that the galleries were crowded. Sir James H. Haslett, M.P., was to have presided, but being unable to be present, Mr. J. C. C. Payne, J.P., on the motion of Mr. John Watson, took his place.

The programme opened with the "Rialto Polka March" (Ellis), played by Mr. Burland's banjo and mandoline band, which was much appreciated. The band also played "Black Bess" (Heath) with similar success. Mr. H. Gaukrodger sang "The Longshoreman" (Chesam), and was warmly applauded. "The Promise of Life" (Cowen) and "Queen of the Earth" (Pinsuti) were contributed by Mrs. D. George. Mr. Diamond recited "The Old Canteen." Miss Adams sang "There's a Land" (Allister) and "The Flight of Ages" "Anchored" (Watson) and "We'll answer to the call" were contributed by Mr. Hume. Mr. J. W. W. Agnew, M.P.S.I., in his rendering of "Thy sentinel am I" (Watson) and "The Song of Hybrius the Cretan" (Elliott) achieved a distinct success; as encores he gave "Still is the night" (F. Abt) and "A hundred fathoms deep." Mr. J. Holmes's selections on fairy bells called forth a persistent encore. "Sailing" (Marks) and "True Till Death" (Gatty) were rendered by Mr. John Gilmore, Mr. J. H. McBratney accompanying on the piano. At the conclusion of the programme, on the motion of Mr. Samuel Gibson, seconded by Mr. J. McConkey, a hearty vote of thanks was passed to the Chairman, the performers, and all who assisted in organising the entertainment. Messrs. D. W. Elliott, L.P.S.I.; R. W. McKnight, L.P.S.I.; David Boyd, L.P.S.I.; Wm. Whyte, L.P.S.I.; W. J. Rankin (hon. sec.), S. Gibson, W. J. Gibson (hon. sec.), John H. Shaw, John Frackleton, and Samuel Hill.



## Notes and News.

THE PHARMACEUTICAL COUNCIL meeting which was convened for December 5 did not take place, owing to there being insufficient members present to form a quorum. The President (Mr. Beggs), the Vice-President (Mr. Bernard) and Messrs. W. F. Wells, Simpson, Grindley, and Brown were the members who attended. The appointment of Mr. J. Henry, Mr. D. O'Sullivan, M.P.S.I., and Mr. J. Guiler, M.P.S.I., as pharmaceutical examiners has been approved of by the Lord Lieutenant.

THE B.P. ADDENDUM was published in December. The addendum deals with the native drugs which may be used in India and the colonies, in some cases as substitutes for drugs in the B.P. The work contains 120 monographs, 54 referring to new articles of the vegetable materia medica, and 66 to preparations. Dr. Attfield, the editor of the work, has thus managed to bring to a conclusion his long-projected scheme of an Imperial Pharmacopœia before the dawn of the new century.

FOWL-POISONING.—A case from Ireland was reported in the *C. & D.*, December 8, page 906, in which the defendant is alleged to have tried to poison a neighbour's fowls with strychnine. The case was dismissed. Dr. E. Berdoo subsequently wrote to the *C. & D.*, expressing surprise that the birds should have been supposed to have come by their deaths from strychnine, as that alkaloid is usually stated to be comparatively inert on fowls. Another correspondent has supplied  $\frac{1}{8}$ ,  $\frac{1}{4}$ , and  $\frac{1}{2}$  gr. strychnine pills as a tonic for a prize Malay cock.

INQUESTS.—Mr. Shaw, registered druggist, Grosvenor Road Belfast, was censured by the coroner, who was holding an inquest on a boy who died of blood-poisoning, for supplying lotion to the deceased. Mr. Shaw points out in the local papers that he did nothing unjustifiable. The Chemists' and Druggists' Society of Ireland are probably to take the matter up.—Hunger and privation were returned by a Newry jury as the cause of the death of an old man named Howard, who for years has sold medicines in the market towns of Ireland. He was familiarly known as the "doctor."

BUSINESS CHANGES.—Mr. R. Armstrong, M.P.S.I., the Medical Hall, Cothill, has reconstructed his premises so that the post office department and the pharmacy parts are entirely separate.—Mr. R. A. Jones, pharmaceutical chemist, Warrenpoint, has removed the postal portion of his business a few doors off, and enlarged his pharmacy business. He has also taken his son, Mr. R. A. Jones, jun., into partnership.—Messrs. Parke & Beatty, chemists, Belturbet, have disposed of their business there to Mr. J. J. Cole, L.P.S.I., who was formerly with Messrs. Hamilton, Long & Co., Dublin.

ARSENICAL BEER has been engaging the attention of the public for the last month. The discovery of arsenic in beer was made by Mr. Wm. Kirkby, a Manchester pharmacist, as a result of endeavours to find out the source of an epidemic of arsenical poisoning in Manchester. It appears that the glucose issued by one firm had become arsenical through the use of impure sulphuric acid in its manufacture. Glucose is used by some brewers to give body to beer in place of malt. The testing of glucose by chemists might be made a profitable extra just now, but the brewers would need approaching in a tactful manner. The best ways of testing for arsenic in glucose and beer are described in the *C. & D.*, December 8, page 921, and December 15, page 968.

BOVRIL'S INVENTOR DEAD.—Mr. J. Lawson Johnstone, the inventor of Bovril and chairman of the board of directors of Bovril (Lim.), died at Cannes November 24. Mr. Johnstone was born at Roslin, Midlothian, in 1839, and in early life made the composition and utility of food-stuffs a hobby. In 1874 he was appointed by the Government to supervise at Montreal the selection and preparation of food-stuffs for the French Army. He remained in Canada for ten years, and whilst there conceived the idea of his "fluid beef," which on his return to England in 1886 he renamed Bovril, improving the preparation and mode of packing at the same time. The preparation "caught on," and in 1889 the Bovril Company (Limited) was formed with a capital of 150,000*l.*, afterwards reconstructed in 1896 with a capital of two and a half millions.

EXT. CASCARA SAG. LIQ.—Mr. R. F. Blake, analyst to the Coleraine Board of Guardians, in reporting on a sample of liquid extract of cascara supplied by Messrs. John Clark & Co. (Limited), Belfast, and containing 20 per cent. of total residue, said a good sample should yield double the amount. He had examined samples which yielded 57.83 and 56.76 per cent. of total residue. The report of the above in THE CHEMIST AND DRUGGIST brought communications from the leading wholesale houses, who gave interesting data from their laboratory books to show that the average yield is 24 per cent. Messrs. P. A. Leslie & Co., Dublin, submitted samples of the same batch of their extract to Professor Tichborne and Mr. Edwin Lapper; the former found it contained 28.8 per cent. of extractive and the latter 32.7 per cent. The discrepancy in the results of the analyses suggests the need of the L.G.B. appointing workhouse analysts with a knowledge of drugs.

## Law Case.

### PHARMACY-ACTS APPEAL.

IN the Queen's Bench Division, Dublin, on December 17, before Chief Baron Palles, Mr. Justice Gibson, and Mr. Justice Johnson, the appeal of Acting-Sergeant Lawler against the decision of the Tullamore Magistrates in the case of Patrick Delaney, an unqualified assistant to Messrs. P. & H. Egan (Limited), for selling corrosive sublimate (see *C. & D.*, November 10, page 777, and November 24, page 854) came up for hearing.

The Magistrates had decided in favour of Delaney, being of opinion that he did not keep open shop within the meaning of the Act. They thought, further, that Messrs. Egan (Limited) should have been proceeded against, not Delaney. The question was whether the Magistrates were correct in point of law.

Mr. Day, B.L., for the appellant and for the Pharmaceutical Society of Ireland, quoted the words of the Act of 1876, "that it shall be unlawful for any person to sell or keep open a shop for retailing, dispensing, or compounding poisons, unless such person be registered as a pharmaceutical chemist, or chemist, or druggist, under this Act." On that and on the authorities he submitted that Delaney was liable.

The Chief Baron: Practically, Mr. Day, you represent the Pharmaceutical Society here?

Mr. Day: Yes, my Lord.

The Chief Baron: And in the court below the proceedings were instituted by the constabulary. If you want to make the Act effective the Society themselves should sue, and the proceedings should be brought on a proper form of summons in the inferior court.

Mr. Day: It is a pity that is not so.

The Chief Baron: I hope it will be done. It is a terrible thing to have a question of such importance to the public coming up here in this way simply because steps were not taken to issue the proper form of summons in the first instance.

Mr. Day asked that the Court should send the case back to the Magistrates, saying that, in their Lordships' opinion, the Justices were wrong in deciding that Delaney was not the seller.

Mr. Justice Johnson said the summons was in bad form, and

The Chief Baron remarked that the Pharmaceutical Society ought to have competent legal assistance in framing their summonses, as the summons in that case was very defective.

Mr. Justice Gibson: A conviction for selling would, I think, be perfectly good.

The Chief Baron said the Magistrates were right in holding that Delaney did not keep open shop within the meaning of the section of the Act, but there were many indications that Delaney did retail and dispense the poison. Delaney was liable to be proceeded against for the sale of the poison, and the case was ordered to be returned to the Magistrates, with that opinion and direction to proceed in accordance therewith, and give effect to it by convicting on that count in the summons.



Paris Exhibition, 1900—British Awards.



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### Pharmaceutical Society of Ireland.

#### EXAMINATIONS.

All Examinations are held during the months of January, April, July, and October, viz.:

The Preliminary Examinations on the FIRST TUESDAYS.

The Pharmaceutical License Examinations on the SECOND WEDNESDAYS and following days.

The Pharmaceutical Assistants Examinations on the SECOND MONDAYS.

The Registered Druggist Examinations on the SECOND TUESDAYS.

*All Applications must be lodged with the Registrar, and fees paid, a clear fortnight before the dates of the respective Examinations.*

#### PHARMACEUTICAL SCHOOLS OF CHEMISTRY, BOTANY, AND MATERIA MEDICA.

The Chemistry School is under the direction of Professor TICHEBORNE, LL.D., F.I.C., L.R.C.S.I., and Diplomate in Public Health, assisted by Mr. P. KELLY, M.P.S.I., and Mr. F. N. BINKS, late "Young" Scholar of Anderson's College, Glasgow.

The Botany and Materia Medica School is under the direction of Mr. J. N. LAIRD, B.A., Large Gold Medallist and Sen. Med. T.O.D., and Mr. J. S. ASHE, M.P.S.I., Medallist and Prizeman in Materia Medica, R.C.S.I., &c., &c.

The Fees for the Courses, in accordance with the Regulations of the Society, are as follows:—

	£	s.	d.
Theoretical Chemistry .. ..	1	1	0
Practical Chemistry (Deposit 3/6) ..	6	6	0
Botany and Materia Medica (combined) ..	2	2	0

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 CC. Cases of 100 pieces, Toilet shapes, £3 15s., averaging  $9d.$  each, to retail at  $1s.$  to  $1s. 3d.$  each.  
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